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MUSIC ON THE INTERNET: IS THERE AN UPSIDE TO DOWNLOADING?

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BEFORE THE

COMMITTEE ON THE JUDICIARY
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MUSIC ON THE INTERNET: IS THERE AN UPSIDE TO DOWNLOADING?

TUESDAY, JULY 11, 2000

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The committee met, pursuant to notice, at 10:05 a.m., in room SH-216, Hart Senate Office Building, Hon. Orrin G. Hatch (chairman of the committee) presiding.

Also present: Senators Leahy, Kohl, Feinstein, and Schumer.

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM THE STATE OF UTAH

The CHAIRMAN. We are happy to welcome you all out to the hearing this morning. It is a very important hearing. It has a lot to do with so many things that go even beyond the music business.

This morning's hearing focuses on issues that have been much in the press and are near and dear to many of us on the dais and those of us listening in the audience.

In case you missed it, there has been an upheaval of sorts concerning how music is copied over the Internet. What Newsweek magazine dubbed "The Noisy War Over Napster" involves more parties and has much broader implications than that moniker implies. Fortune magazine has called the technology embodied in Napster and Gnutella "The Next Big Thing" for the Internet.

At the outset, let me make it clear that it is not this committee's purpose or intention to interfere with the litigation and settlement discussions that are presently taking place. Nor do I see our discussions entering into the wider array of issues concerning technology standards for players or related topics.

Our reasons for holding this hearing are to learn more about what is taking place in the marketplace and, in doing so, better equip us to advance the interests of consumers and creators. Insofar as consumers are concerned, they desire access to downloadable music which is not unnecessarily restrictive or unduly burdensome. I want to ensure that the marketplace provides them with the opportunity to access the music they want to hear over the Internet and to do so legally. Insofar as creators are concerned, I want to ensure that artists and creators are protected through an approach to copyright that empowers them to generate maximum revenue for their creative works.

Recognizing the potential the Internet offered consumers and creators, I led the efforts to pass, and Senator Leahy and I did, the

Digital Millennium Copyright Act which sought to harmonize the copyright laws with the technological changes taking place.

Now, this law sought to ensure that copyrighted content would continue to be protected by copyright law in the digital environment, but also sought the flexibility necessary to allow the Internet technology and businesses to flourish while making copyrighted content available.

For the most part, passage of the DMCA has proven to be a prescient achievement, settling many complex liability issues up front and allowing the online businesses to grow. It was our hope that it would give creators incentive to make their products available on the Internet. In short, it was believed that a stable, predictable legal environment would encourage the deployment of business models which would make properly licensed content more widely available. Sadly, this has not yet occurred to any great extent in the music industry, and the DMCA is nearly 2 years old.

As chairman of the Judiciary Committee, I take it as a basic premise that our copyright laws must play a role, a strong role, in protecting creative works over the Internet. These protections, however, must be secured in a manner which is mindful of the impact regulation can have on the free flow of ideas that a decentralized, open network like the Internet creates. We must protect the rights of the creator, but we cannot, in the name of copyright, unduly burden consumers and the promising technology that Internet presents to all of us.

With this in mind, it is my hope that we can learn more about the online music marketplace and why there is so much disharmony. We have with us this morning a number of different models of online music services.

MP3.com is a music service provider and offers a number of different services to users. MP3.com shares revenues with artists, often on a 50/50 basis. And we have Emusic, which offers downloads of singles or whole albums, paid for either per song or per album. Emusic has deals with many independent record labels and offers deals to artists that are structured similarly to recording contracts.

Both Emusic and MP3.com can track usage levels to accurately account to the artists for use of their music and pay them accordingly. And both Emusic and MP3.com are structured with a central server Web site that makes music licensing relatively easy for creators and consumers. Their organization is similar to the chart on display which diagrams a traditional Web-based search engine, where an individual's computer deals with information sources through the intermediary of a single server.

By way of contrast, consider the architecture of the Napster and Gnutella communities, as represented in these schematic charts over on the right here. As you can see, Napster, which is a business, operates with a central server site through which members submit requests. Requests proceed from the central site out to other Napster users. And with Gnutella, there is no central point, but we are linked directly to other Gnutella users' PC's. We can download the music directly from any Gnutella users' computer to which we are linked.

This organization has implications for both music licensing and for broader Internet technology. To quote Andy Grove, of Intel, "The whole Internet could be re-architected by Napster-like technology." Using this peer-to-peer technology to search for information on the Internet allows us to get the most up-to-date information direct from the source, as opposed to traditional Web search engines that are made through intermediaries.

With regard to music licensing, however, as you might guess from the charts, peer-to-peer file-sharing poses a much greater challenge than single-source licensing. With each user being a publisher to a greater or lesser degree, the relative lack of a real distribution center makes licensing somewhat chaotic and haphazard, which brings us to the nub of this hearing.

This technology presents a unique opportunity to those who make a living by producing copyrighted works. They can be self-publishers dealing directly with their fans. But it also presents a unique threat, if misused, to rob them of their livelihood, which could rob all of us of their continued work by destroying the incentives to create and publish their works, all of which will require much greater creativity in licensing or distributing copyrighted creative works.

To illustrate the file-sharing technology that has proved so controversial, we will demonstrate how a search and download of music is done using Gnutella. If you will direct your attention to the monitors, you will be able to see the process from a live Internet connection.

First, we submit a request for particular music or a particular artist. As I mentioned before, we do not submit the request to a central site, but rather we link directly to other Gnutella users and relay our requests through the individual hard drives of members of the new telecommunity who are online.

If you look at the bottom left-hand corner of the screen, you can see how many connections we have made with other users. The search engine returns to us a list of the relevant music files available to us from other Gnutella users, together with information on the size of the file and the other users' bandwidth, and hence probable download speed. We can choose from among the many options returned which files to download, and can watch the progress of downloading. Since the downloading will take a few minutes, we will return to play the music after the ranking member's remarks.

Once the file is downloaded, because the music is in a digital format, I can copy it onto a number of different listening devices to take the music with me. I think music fans have expressed a strong interest in getting popular, legitimate music in this format.

One continuing problem raised throughout the evolution of online music, however, is the complaint that the major record labels have not been willing to license online music distributors to provide their music, or have offered licenses on terms much different than online entities related to those labels.

While I do not think that copyright owners have any general duty to license their products to others, a complete lack of licensing puts in question the labels' professed desire to be ubiquitous. And a policy of merely cross-licensing among major label-related entities

might raise some competition concerns that this committee would have a duty to consider.

In short, I believe there are opportunities for synergy here between the creators of music and the technology companies who can help make that music available to consumers in more convenient and enjoyable forms. Some creative cooperation might be to everyone's benefit, especially consumers and creators. I look forward to hearing what each of our witnesses envisions for the future of digital music.

We will turn at this time to the ranking member.

**STATEMENT OF HON. PATRICK J. LEAHY, A U.S. SENATOR
FROM THE STATE OF VERMONT**

Senator LEAHY. Thank you, Mr. Chairman. I do feel this is an important hearing. In fact, I came back around 2 a.m. or 2:30 a.m. this morning from Ireland, where somebody with my name should probably be more often, to be here for the hearing.

I should mention, as I mentioned to Mr. Ulrich and others earlier, I did become a hero in my daughter's eyes because I took her to lunch with Bono and the other members of U2. She got to go down to their studio and listen to them recording their new album, and now she realizes that there is a reason for her father to be in the U.S. Senate.

The CHAIRMAN. You should have taken me, too.

Senator LEAHY. I would have. They asked about you immediately.

The CHAIRMAN. I can imagine. [Laughter.]

Senator LEAHY. And after they asked about you, I told them, I want you to know.

The CHAIRMAN. Well, I want you to know we helped Bono on his World Hunger Campaign.

Senator LEAHY. I know.

The CHAIRMAN. He has been in the office. He is a great guy.

Senator LEAHY. He is; Irish, too. A lot of the Irish are nice. There is Manus, for example, and myself.

The CHAIRMAN. I happen to be Irish, too.

Senator LEAHY. Are you reinventing yourself? I thought only members of our party did that, Mr. Chairman.

The CHAIRMAN. I have so many mixtures that I can almost claim everybody, let me tell you.

Go ahead.

Senator LEAHY. This could go on forever.

You know, it is interesting, talking about downloading this music, as the chairman said, it is going to take a while to do it, and it also points out an interesting situation we have in the Senate. The Senate is so far behind in technology on these things, it is going to take us that long because we don't use DSL lines. We don't use anything like that.

We will do oversight on companies that do those things, but we have barely moved beyond the quill pens ourselves. And I would hope—this is one more example—that maybe the leadership in the Senate will let us move, if not into the 21st century, at least into the latter part of the 20th century on technology.

When I go out to spend time with my son in California—and I will talk about this a little bit later on—we find in downloading these kinds of things it is virtually instantaneous, which is also both the good and the bad. As Hilary Rosen and others will think about sitting here, it is the good and bad of the news.

America's Founders recognized and valued citizen creativity so much that they rooted intellectual property rights in the Constitution. Article I, section 8, clause 8, of the Constitution grants that, "The Congress shall have power * * * [t]o promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." It is in the Constitution right from the beginning. The Continental Congress proclaimed, "Nothing is more properly a man's own than the fruit of his study."

Protecting intellectual property rights is just as important today as it was when America was a fledgling Nation, at a time when none of us could have conceived what might happen. In fact, the intellectual property generated in our country is the envy of the rest of the world.

The challenge of protecting intellectual property, such as computer programs, sound recordings, motion pictures, and other copyrighted works in electronic formats has been the focus of this committee's attention for the past few Congresses. In the last Congress, we passed the No Electronic Theft Act to close the loophole in the law that granted complete immunity from criminal liability to willful copyright infringers. Closing this loophole was something I had worked on since 1995, and together with Senator Kyl, we were able to close that loophole in 1997.

In 1998, the chairman and I worked closely together on the DMCA, the Digital Millennium Copyright Act. We wanted to advance the complementary goals of protecting intellectual property rights in a digitally-networked world and promoting the continued growth of electronic commerce. Bruce Cohen, Beryl Howell, and others on my staff have spent a disproportionate amount of their time on these kinds of issues.

As new online services are launched and new Web sites created, the DMCA is helping order the online environment. In fact, earlier this year a Federal court relied on the DMCA to shut down Web sites that were used to post a computer program permitting users to break the encryption used to protect copyrighted motion pictures on DVD's and then to copy the movies without permission. So it did work.

In other pending cases, involving some of the witnesses we will hear from today, the applicability of provisions in the DMCA which limit liability for Internet service providers when they act as mere conduits for networked communications or simply provide tools are also being explored.

Often, the discussion over how to protect intellectual property rights has developed into a debate over whether such protection will stop technological innovation. I don't want that to be the case, and I would be the first person in the Senate to oppose that. I want this technological innovation.

As we wrote some of these laws 2 or 3 years ago, none of us could have even foreseen what was going on there. And I can bet, among

all of you here who probably know as much about this as anybody in the country, you could not predict what we are going to see 4 years from now or 5 years from now, maybe even a year from now.

Protection of intellectual property provides incentives to promote scientific and artistic advancement. But the interests of intellectual property protection and technological innovation sometimes appears to collide, as we have seen in MP3, Napster, and so on.

Two years ago, a 19-year-old college freshman created a software program called Napster that has grown exponentially in popularity. I don't know a kid in Vermont at any of our colleges who doesn't use it. It allows users to find music files in other users' hard drives. Then you access the music file, you download it, all in a matter of really minutes; actually, seconds, if you don't have a Senate connection, or within an hour or two if you are up here in the quill pen area.

Sharing files in this way among strangers has been likened by some to sharing a CD among friends. The courts are in the process of sorting out the legality of sharing files of copyrighted music on the scale of Napster, and we should think about that.

You know, there is a lot of publicity about Napster, but that is not the recording industry's worst nightmare. Other software programs are being developed that pose far more difficult challenges for copyright protection. Gnutella and Freenet are file-sharing programs; we are going to hear more about those. They don't require a central server for users to connect to each other. Instead, Gnutella uses the Internet service providers of its users for connectivity.

In just going back and forth trying out these different technologies, I realized how easy it is for anybody to do it. The programs are not proprietary. They are not owned by a specific company. It leaves copyright owners in search of a responsible party to hold accountable.

Online music programs show strong consumer demand for new artists and for good music delivered over the Internet. Let's not forget about that. There are a lot of new artists who are being discovered this way. It allows new artists to become known. They are going to open new avenues for the copyright industries to reach consumers. The music industry is accelerating development of legitimate means for satisfying the consumer demand for online access to music.

History has shown that when new technologies emerge, they may seem to threaten to trump intellectual property protection. In the end, things tend to get sorted out. Remember how the movie industry was so afraid of videotape? They wanted us to block that. There is not a movie made today that they don't plan in it what is going to be the after-sale on video. In fact, some movies that bomb at the box office make their money back on video.

The concert tapes of Grateful Dead fans come to mind. I used to go to a lot of Grateful Dead concerts. It used to be kind of funny seeing the Volkswagen vans parked out back and here is one car with Vermont license plate "1" looking a little bit out of place. I remember how everybody used to be able to tape those, and now those are traded and sold. Dick's Picks does very well on it.

So I hope we are going to find how best to make this work, how best to expand, the same way the movie industry did, but to protect the legitimate rights. If you write a song, if you record something, if you have gone to the work of putting your expertise on it, you ought to be rewarded for it. If people are going to enjoy it, you ought to be rewarded for that work, in the same way if I came over and painted your house, I ought to be paid for that. At the same time, let's not strangle the baby in the crib; let's make it work.

Mr. Chairman, I notice there is a vote on. I don't know what you want to do.

The CHAIRMAN. I think what we are going to do is the Gnutella download is complete, I understand. We searched for music from a popular rock group called Creed, and our search turned up hundreds of Creed songs from their million-selling albums. We downloaded just one of these songs.

Senator Leahy and I want to hear every one of you, so we are going to go vote while you listen to one of these songs. Is that all right? [Laughter.]

Senator LEAHY. I am going to put my laptop up here so I can download a couple of them, too.

The CHAIRMAN. I have to say that I was listening to Metallica this morning in my office. [Laughter.]

Actually, you could use my lyricist ability.

Mr. ULRICH. Thank you very much.

The CHAIRMAN. Actually, they are pretty darn good—well, not pretty darn good. Anybody that can sell 10 million CD's on one thing, I am all for, let me tell you. I am really proud of you. [Laughter.]

I don't want to say too much more, because of the 2,000 that we normally sell.

Let me just say this. I would like you all to listen to Creed, and then we want to come back and we will start with Mr. Lars Ulrich. I want to hear what he has to say, as well as every one of these witnesses. We have one of the most diverse groups of people we have ever had on any Internet hearing that we have had in the U.S. Senate, and really very exciting people as far as I am concerned. So we appreciate all of you coming.

We will go vote and we will be right back.

SENATOR LEAHY. Mr. Chairman, are you sure you don't want to come up and hear my music?

The CHAIRMAN. Listen, I like the Grateful Dead, too, but I am not a slavish devotee. We will put it that way. [Laughter.]

We will listen to the music and we will be right back.

[The committee stood in recess from 10:26 a.m. to 10:41 a.m.]

The CHAIRMAN. If we can have your attention, we have eight distinguished witnesses here with us today. Our first witness is Mr. Lars Ulrich, a member of the musical group Metallica. Mr. Ulrich co-founded Metallica in 1981 and has been the band's spokesperson on a number of occasions, including most recently in its dispute with Napster.

In 1999, Metallica became only one of three bands to receive the Diamond Award from the Recording Industry of America, signifying sales of over 10 million copies from a single title. That is pretty impressive, very impressive, stupendously impressive.

Mr. ULRICH. Thank you.

The CHAIRMAN. And you don't need a lyricist either; you are doing a very good job yourself. We are very happy to have you with us.

Mr. ULRICH. Thank you.

The CHAIRMAN. Next, we will hear from Mr. Roger McGuinn. Mr. McGuinn is co-founder of the musical group The Byrds. Today, Mr. McGuinn tours the world virtually non-stop, often performing acoustic numbers as a solo musician. We are really honored to have you here.

Mr. MCGUINN. Thank you.

The CHAIRMAN. Moreover, Mr. McGuinn primarily makes his music available to his listeners on the Internet through his own Web site and the MP3.com site.

Mr. Hank Barry will address us. Mr. Barry is the Chief Executive Officer of Napster, a software company that enables users to share files, and mostly famous music files, through their computers. Mr. Barry is also currently a partner at Hummer Windblad Venture Partners. Mr. Barry has had over 15 years' experience working with media and technology companies, and prior to joining Hummer Windblad, Mr. Barry was the corporate and securities partner at Wilson, Suncini, Goodrich and Rosatti.

We will then hear from Mr. Michael Robertson, Chairman and CEO of MP3.com. MP3.com is a Web-based Internet site that sells and distributes music of almost every genre to its users. Prior to starting MP3.com, Mr. Robertson has worked as a consultant to many high-tech companies. What you have accomplished is nothing less than sensational yourself. In fact, all of you are just top people in your fields.

Mr. Fred Ehrlich will then address us. Mr. Ehrlich is the President of New Technology and Business Development for Sony Music Entertainment. Mr. Ehrlich is responsible for online promotion and marketing of the company's music. Prior to joining Sony, Mr. Ehrlich served as Vice President and General Manager of Columbia Records. We are looking forward to your point of view as well, Mr. Ehrlich, and I have great respect for you.

Next, Mr. Gene Hoffman, Jr., will speak to us. Mr. Hoffman is the founder, President and CEO of Emusic.com. Emusic.com is a leading site on the Internet for sampling and purchasing music, and currently has licensing agreements with over 600 independent record labels.

I think I have that right, don't I?

Mr. HOFFMAN. Yes.

The CHAIRMAN. It is terrific to have you here.

After Mr. Hoffman, we will be pleased to hear from Mr. Gene Kan. Mr. Kan is the developer of Gnutella. Now, I have to say that is quite an accomplishment. Gnutella, of course, is a real-time information search protocol. Prior to developing Gnutella, Mr. Kan has worked as a computer engineer in software development. Mr. Kan graduated from the University of California at Berkeley in 1997 with a degree in electrical engineering and computer science.

Our final witness will be Mr. Jim Griffin, the founder and CEO of Cherry Lane Digital LLC and OneHouse LLC. Both companies provide consulting services to entertainment companies working to

provide digital products and services. Prior to founding Cherry Lane and OneHouse, Mr. Griffin was the Director of Technology at Geffen Records from 1993 to 1998, where he created and ran the label's technology department. And we are all familiar with Geffen Records.

So I want to thank each of our distinguished witnesses for being with us today. We know that you are all busy people and we know that you have taken time out from not only busy but very important schedules, and we are honored to have all of you here.

Mr. Ulrich, I really look forward to hearing your testimony, as well as all the others. So we will start with you.

**STATEMENT OF LARS ULRICH, MEMBER AND CO-FOUNDER,
METALLICA MUSICAL GROUP, NY**

Mr. ULRICH. Mr. Chairman, my name is Lars Ulrich. I was born in Denmark. In 1980, as a teenager, my parents and I came to America. I started a band named Metallica in 1981 with my best friend, James Hetfield. By 1983, we had released our first record, and by 1985 we were no longer living below the poverty line.

Since then, we have been very fortunate to achieve a great level of success in the music business throughout the world. It is the classic American dream come true. I am very honored to be here in this country, and I am very honored to appear before the Senate Judiciary Committee.

Earlier this year while completing work on a song for the movie "Mission Impossible 2," we were startled to hear reports that five or six versions of our work in progress were already being played on some U.S. radio stations. We traced the source of this leak to a corporation called Napster. Additionally, we learned that all our previously recorded copyrighted songs were, via Napster, available for anyone around the world to download from the Internet in a digital format known as MP3. In fact, in a 48-hour period where we monitored Napster, over 300,000 users made 1.4 million free downloads of Metallica's music. Napster hijacked our music without asking. They never sought our permission. Our catalog of music simply became available for free downloads on the Napster system.

I do not have a problem with any artist voluntarily distributing his or her songs through any means that artist so chooses. But just like a carpenter who crafts a table gets to decide whether he wants to keep it, sell it, or give it away, shouldn't we have the same options? We should decide what happens to our music, not a company with no rights to our recordings, which has never invested a penny in our music, or had anything to do with its creation. A choice has been taken away from us.

With Napster, every song by every artist is available for download at no cost, and of course with no payment to the artist, the songwriter, or the copyright holder. If you are not fortunate enough to own a computer, there is only one way to assemble a music collection the equivalent of a Napster user—theft. Walk into a record store, grab what you want, and walk out. The difference is that the familiar phrase "files done" is now replaced by another familiar phrase, "you are under arrest."

Since what I do is make music, let's talk about the recording artist for a moment. When Metallica makes an album, we spend many

months and many hundreds of thousands of our own dollars writing and recording. We typically employ a record producer, recording engineers, programmers, assistants, and occasionally other musicians. We rent time for months at recording studios which are owned by small businessmen who have risked their own capital to buy, maintain, and constantly upgrade very expensive equipment and facilities. Our record releases are supported by hundreds of record companies and employees, and provide programming for numerous radio and television stations.

Add it all up and you have an industry with many jobs, a few glamorous ones like ours, and lots more covering all levels of the pay scale and providing wages which support families and contribute to our economy. Remember, too, that my band, Metallica, is fortunate enough to make a great living from what we do. Most artists are barely earning a decent wage and need every source of revenue available to scrape by.

Also keep in mind that the primary source of income for most songwriters is from the sale of records. Every time a Napster enthusiast downloads a song, it takes money from the pockets of all these members of the creative community. It is clear, then, that if music is free for downloading, the music industry is not viable. All the jobs I just talked about will be lost and the diverse voices of the artists will disappear. The argument I hear a lot that music should be free must then mean that musicians should work for free. Nobody else works for free. Why should musicians?

In economic terms, music is referred to as intellectual property, as are films, television programs, books, computer software, video games, and the like. As a Nation, the United States has excelled in the creation of intellectual property, and collectively it is this country's most valuable export. The backbone for the success of our intellectual property business is the protection that Congress has provided with the copyright statutes. No information-based industry can thrive without this protection.

For instance, our current political dialogue with China is focused on how we must get that country to respect and enforce copyrights. How can we continue to take that position if we let our own copyright laws wither in the face of technology?

Make no mistake about it, Metallica is not anti-technology. When we made our first album, most records were on vinyl. By the late 1980's, cassette sales accounted for over 50 percent of the market. Now, the compact disc dominates. If the next format is a form of downloading from the Internet, with distribution and manufacturing savings passed on to the American consumer, then, of course, we will embrace that format.

But how can we embrace a new format and sell our music for a fair price when somebody with a few lines of codes, no investment costs, no creative input, and no marketing expenses simply gives it away? How does this square with the level playing field of the capitalist system?

In Napster's brave new world, what free-market economic model supports our ability to compete? The touted new paradigm that the Internet gurus tell us we must adopt sounds to me like good old-fashioned trafficking in stolen goods. We have to find a way to welcome the technological advances and cost savings of the Internet.

However, this must be done without destroying the artistic diversity and the international success that has made our intellectual property industries the greatest in the world. Allowing our copyright protections to deteriorate is, in my view, bad policy both economically and artistically.

In closing, I would like to underscore what I have spoken about today. I would like to read from the Terms of Use section of the Napster Internet Web site. When you use Napster, you are basically agreeing to a contract that includes the following terms, "This Web site or any portion of this Web site may not be reproduced, duplicated, copied, sold, resold, or otherwise exploited for any commercial purpose that is not expressly permitted by Napster. All Napster Web site design, text, graphics, the selection and arrangement thereof, and all Napster software are Copyright 1999–2000 Napster Inc." Napster itself wants, and surely deserves, copyright and trademark protection. Metallica and other creators of music and intellectual property want, deserve, and have a right to that same protection.

Finally, I would just like to read to you from a recent New York Times column by Edward Rothstein, "Information does not want to be free. Only the transmission of information wants to be free. Information, like culture, is the result of a labor and devotion, investment, and risk. It has a value, and nothing will lead to a more deafening cultural silence than ignoring that value in celebrating * * * [companies like] Napster running amok."

Mr. Chairman, Senator Leahy, the title of today's hearing asks the question: "The Future of the Internet: Is There an Upside to Downloading?" My answer is yes. However, as I hope my remarks have made clear, this can only occur when artists' choices are respected and their creative efforts protected.

Thank you very much.

The CHAIRMAN. Thank you, Mr. Ulrich. We appreciate your testimony.

[The prepared statement of Mr. Ulrich follows:]

PREPARED STATEMENT OF LARS ULRICH

Mr. Chairman, Senator Leahy, Members of the Committee, my name is Lars Ulrich. I was born in Denmark. In 1980, as a teenager, my parents and I came to America. I started a band named Metallica in 1981 with my best friend James Hetfield. By 1983 we had released our first record, and by 1985 we were no longer living below the poverty line. Since then, we've been very fortunate to achieve a great level of success in the music business throughout the world. It's the classic American dream come true. I'm very honored to be here in this country, and to appear in front of the Senate Judiciary Committee today.

Earlier this year, while completing work on a song for the movie Mission Impossible–2, we were startled to hear reports that a work-in-progress version was already being played on some U.S. radio stations. We traced the source of this leak to a corporation called Napster. Additionally, we learned that all of our previously recorded copyrighted songs were, via Napster, available for anyone around the world to download from the Internet in a digital format known as MP3. As you are probably aware, we became the first artists to sue Napster, and have been quite vocal about it as well. That's undoubtedly why you invited me to this hearing.

We have many issues with Napster. First and foremost: Napster hijacked our music without asking. They never sought our permission—our catalog of music simply became available as free downloads on the Napster system.

I don't have a problem with any artist voluntarily distributing his or her songs through any means the artist elects—at no cost to the consumer, if that's what the artist wants. But just like a carpenter who crafts a table gets to decide whether to keep it, sell it or give it away, shouldn't we have the same options? My band au-

thored the music which is Napster's lifeblood. We should decide what happens to it, not Napster—a company with no rights in our recordings, which never invested a penny in Metallica's music or had anything to do with its creation. The choice has been taken away from us.

What about the users of Napster, the music consumers? It's like each of them won one of those contests where you get turned loose in a store for five minutes and get to keep everything you can load into your shopping cart. With Napster, though, there's no time limit and everyone's a winner—except the artist. Every song by every artist is available for download at no cost and, of course, with no payment to the artist, the songwriter or the copyright holder.

If you're not fortunate enough to own a computer, there's only one way to assemble a music collection the equivalent of a Napster user's: theft. Walk into a record store, grab what you want and walk out. The difference is that the familiar phrase a computer user hears, "File's done," is replaced by another familiar phrase—"You're under arrest."

Since what I do is make music, let's talk about the recording artist for a moment. When Metallica makes an album we spend many months and many hundreds of thousands of our own dollars writing and recording. We also contribute our inspiration and perspiration. It's what we do for a living. Even though we're passionate about it, it's our job.

We typically employ a record producer, recording engineers, programmers, assistants and, occasionally, other musicians. We rent time for months at recording studios which are owned by small businessmen who have risked their own capital to buy, maintain and constantly upgrade very expensive equipment and facilities. Our record releases are supported by hundreds of record company employees and provide programming for numerous radio and television stations. Add it all up and you have an industry with many jobs—a very few glamorous ones like ours—and a greater number of demanding ones covering all levels of the pay scale for wages which support families and contribute to our economy.

Remember too, that my band, Metallica, is fortunate enough to make a great living from what it does. Most artists are barely earning a decent wage and need every source of revenue available to scrape by. Also keep in mind that the primary source of income for most songwriters is from the sale of records. Every time a Napster enthusiast downloads a song, it takes money from the pockets of all these members of the creative community.

It's clear, then, that if music is free for downloading, the music industry is not viable; all the jobs I just talked about will be lost and the diverse voices of the artists will disappear. The argument I hear a lot, that "music should be free," must then mean that musicians should work for free. Nobody else works for free. Why should musicians?

In economic terms, music is referred to as intellectual property, as are films, television programs, books, computer software, video games, and the like. As a nation, the U.S. has excelled in the creation of intellectual property, and collectively, it is this country's most valuable export.

The backbone for the success of our intellectual property business is the protection that Congress has provided with the copyright statutes. No information-based industry can thrive without this protection. Our current political dialog about trade with China is focused on how we must get that country to respect and enforce copyrights. How can we continue to take that position if we let our own copyright laws wither in the face of technology?

Make no mistake, Metallica is not anti-technology. When we made our first album, the majority of sales were in the vinyl record format. By the late 1980's, cassette sales accounted for over 50% of the market. Now, the compact disc dominates. If the next format is a form of digital downloading from the Internet with distribution and manufacturing savings passed on to the American consumer, then, of course, we will embrace that format too.

But how can we embrace a new format and sell our music for a fair price when someone, with a few lines of code, and no investment costs, creative input or marketing expenses, simply gives it away? How does this square with the level playing field of the capitalist system? In Napster's brave new world, what free market economy models support our ability to compete? The touted "new paradigm" that the Internet gurus tell us we Luddites must adopt sounds to me like old-fashioned trafficking in stolen goods.

We have to find a way to welcome the technological advances and cost savings of the Internet while not destroying the artistic diversity and the international success that has made our intellectual property industries the greatest in the world. Allowing our copyright protections to deteriorate is, in my view, bad policy, both economically and artistically.

To underscore what I've spoken about today, I'd like to read from the "Terms of Use" section of the Napster Internet web site. When you use Napster you are basically agreeing to a contract that includes the following terms:

"This web site or any portion of this web site may not be reproduced, duplicated, copied, sold, resold, or otherwise exploited for any commercial purpose that is not expressly permitted by Napster."

"All Napster web site design, text, graphics, the selection and arrangement thereof, and all Napster software are Copyright© 1999-00 Napster Inc. All rights reserved Napster Inc."

"Napster, the logo and all other trademarks, service marks and trade names of Napster appearing on this web site are owned by Napster. Napster's trademarks, logos, service marks, and trade names may not be used in connection with any product or service that is not Napster's."

Napster itself wants—and surely deserves—copyright and trademark protection. Metallica and other creators of music and intellectual property want, deserve and have a right to that same protection.

In closing, I'd like to read to you from the last paragraph of a New York Times column by Edward Rothstein:

"Information doesn't want to be free; only the transmission of information wants to be free. Information, like culture, is the result of a labor and devotion, investment and risk; it has a value. And nothing will lead to a more deafening cultural silence than ignoring that value and celebrating . . . [companies like] Napster running amok."

Mr. Chairman, Senator Leahy and Members of the Committee, the title of today's hearing asks the question, "The Future of the Internet: Is there an Upside to Downloading"? My answer is yes. However, as I hope my remarks have made clear, this can only occur when artists' choices are respected and their creative efforts protected.

Thank you.

The CHAIRMAN. Mr. McGuinn, we will take you at this time.

STATEMENT OF ROGER McGUINN, FORMER MEMBER AND CO-FOUNDER, THE BYRDS MUSICAL GROUP, WINDEMERE, FL

Mr. McGUINN. Thank you, Senator. It is a pleasure to be here. My name is Roger McGuinn and I have been in the recording business for approximately 40 years. I started back in 1960 when I recorded with a group called the Limelighters, and subsequently recorded with the Chad Mitchell Trio and Judy Collins and Bobby Darin, and I was not a royalty artist at that time.

I became a royalty artist when I signed a contract with Columbia Records with a group called the Byrds, and we recorded 15 albums, or so, during that period. Aside from modest advances for each of these albums, I never saw any royalties, and so I am just saying that the protection for artists, the issue of that—the artists don't always get the royalties they are supposed to get from the record companies.

When you sign a contract that says you are going to get 15 percent, there are ways the record companies have of not paying these royalties. And in my experience, even though we have had number one hits with "Mr. Tambourine Man" and "Turn, Turn, Turn," I saw nothing but the advance, which is divided five ways. It was only a few thousand dollars apiece, and with the advent of MP3.com, I am getting 50 percent of the CD's that come out now. I think it is a wonderful thing.

I have a Web site, mcguinn.com, and there I have a project called The Folk Den, where I am preserving traditional songs. Each month, I upload a traditional song for people to listen to, and it is free. It is a public service and it is sponsored by the University of North Carolina. And somebody from MP3.com invited me to put my

songs over on their site as well, and I thought it was a good opportunity to get them to a more global market. So I really appreciate the transmission of MP3's over the Internet.

These songs are traditional, public domain songs, and I am not worried about the copyright or publishing problem. I can see how someone might be if they were not being paid their publishing rights, and I think that MP3 servers should make deals with the publishing companies. They should make deals with BMI and ASCAP, and have proper royalties paid to artists. But as far as my experience in the record business, the artist doesn't always receive royalties from the record companies. That has been my experience.

The CHAIRMAN. Well, thank you, Mr. McGuinn. That is a complaint I have heard from a number of people.

[The prepared statement of Mr. McGuinn follows:]

PREPARED STATEMENT OF ROGER MCGUINN

Hello, my name is Roger McGuinn. My experience in the music business began in 1960 with my recording of "Tonight In Person" on RCA Records. I played guitar and banjo for the folk group the "Limelites." I subsequently recorded two albums with the folk group the "Chad Mitchell Trio." I toured and recorded with Bobby Darin and was the musical director of Judy Collins' third album. In each of those situations I was not a royalty artist, but a musician for hire.

My first position as a royalty artist came in 1964 when I signed a recording contract with Columbia Records as the leader of the folk-rock band the "Byrds." During my tenure with the Byrds I recorded over fifteen albums. In most cases a modest advance against royalties was all the money I received for my participation in these recording projects.

In 1973 my work with the Byrds ended. I embarked on a solo recording career on Columbia Records, and recorded five albums. The only money I've received for these albums was the modest advance paid prior to each recording.

In 1977 I recorded three albums for Capitol Records in the group "McGuinn Clark and Hillman." Even though the song "Don't You Write Her Off" was a top 40 hit, the only money I received from Capitol Records was in the form of a modest advance.

In 1989 I recorded a solo CD, "Back from Rio", for Arista Records. This CD sold approximately 500,000 copies worldwide, and aside from a modest advance, I have received no royalties from that project.

The same is true of my 1996 recording of "Live From Mars" for Hollywood Records. In all cases the publicity generated by having recordings available and promoted on radio created an audience for my live performances. My performing work is how I make my living. Even though I've recorded over twenty-five records, I cannot support my family on record royalties alone.

In 1994 I began making recordings of traditional folk songs that I'd learned as a young folk singer. I was concerned that these wonderful songs would be lost. The commercial music business hasn't promoted traditional music for many years. These recordings were all available for free download on my website <http://www.mcguinn.com> on the Internet.

In 1998 an employee of MP3.com heard the folk recordings that I'd made available at <http://www.mcguinn.com> and invited me to place them on MP3.com <http://www.mp3.com>. They offered an unheard of, non-exclusive recording contract with a royalty rate of 50% of the gross sales. I was delighted by this youthful and uncommonly fair approach to the recording industry. MP3.com not only allowed me to place these songs on their server, but also offered to make CDs of these songs for sale. They absorbed all the packaging and distribution costs. Not only is MP3.com an on-line record distributor, it is also becoming the new radio of the 21st century!

So far I have made thousands of dollars from the sale of these folk recordings on MP3.com, and I feel privileged to be able to use MP3s and the Internet as a vehicle for my artistic expression. MP3.com has offered me more artistic freedom than any of my previous relationships with mainstream recording companies. I think this avenue of digital music delivery is of great value to young artists, because it's so difficult for bands to acquire a recording contract. When young bands ask me how to get their music heard, I always recommend MP3.com <http://www.mp3.com>.

The CHAIRMAN. Mr. Barry, we will take your testimony at this time.

**STATEMENT OF HANK BARRY, CHIEF EXECUTIVE OFFICER,
NAPSTER, INC., SAN MATEO, CA**

Mr. BARRY. Thank you, Senator. Good morning, and thanks for inviting me to appear here today. I represent Napster, Inc., and the members of the Napster community. If you would for a moment, I would like to recognize Shawn Fanning, who is 19 today. He is the inventor of Napster and he is sitting right behind me, right there.

This committee is at the center of the great constitutional debates of our country and the protection of the rights we cherish as Americans. In the coming years, your committee will continue its important oversight role of the legal issues in the Internet world, and I am happy to be part of that endeavor.

Let me begin with a general point on which I think everyone in this room can agree. Americans love music, and Americans are listening to and making music like never before. Record sales and music radio listening are up. Schools bands, choirs, and drum and bugle corps are back, and Napster's success reflects that love of music.

As of this morning, after less than a year, without any advertising or promotion, Napster has attracted nearly 20 million users. Over half of them are over 30 years of age and they are evenly split between men and women. In the evenings, we consistently have about 500,000 people using the service simultaneously. By comparison, that is about one-third the number of people using America Online at the same time.

I would like to talk to you today about Napster's technology, Napster's impact, and Napster's future. As you noted, Andy Grove, the Chairman of Intel, recently said, that, "The whole Internet could be re-architected by Napster-like technology." Let me try to place his observation in some historical context.

As you know, the Internet began as a redundant communication network among scientists involved in defense research. They needed to reliably share information that was distributed all over the system, all over the DARPA Net. The commercial use of the Internet for media purposes abandoned that structure. Instead, Internet companies adopted the broadcast model, with large centralized computers that served the information to the consumer's PC as if it were a television receiver. Serving, and not sharing, became the dominant approach.

Shawn Fanning began a revolution that is returning the Internet to its roots. Napster is an application that allows users to learn about other's tastes and share their MP3 files. If users choose to share files, and they are not required to, the application makes a list of those files and sends the list, and only the list, to become part of the central Napster directory. The Napster directory then is a temporary and ever-changing list of all the files the members of the community are willing to share.

Users can search that list, comment on the files on others' computers, and see what other people like and chat about all this. They do this all for no money, expecting nothing in return, on a person-to-person basis. That is it. Napster does not copy files. It does not

provide the technology for copying files. Napster does not make MP3 files. It does not transfer any files. Napster simply facilitates communication among people interested in music. It is a return to the original information-sharing approach of the Internet, and it allows for a depth and a scale of information that is truly revolutionary.

Napster is helping and not hurting the recording industry and artists. A chorus of studies show that Napster users buy more records as a result of using Napster, and that sampling music before buying is the most important reason that people use Napster. Users that transfer more than 20 files soon delete over 95 percent of those files.

In the last 6 months, as you all know, record sales are up more than 8 percent from the previous year, an increase of more than \$1 billion. Like other advances in technology, what Napster shows is that more access to music leads to more interest in music and more music sales.

Lawsuits against Napster contend that our 20 million users, the recording industry's best customers, are guilty of copyright infringement. We strongly disagree. Copyright is not absolute. As Senator Leahy mentioned, it has limits; it is for a limited time in the Constitution.

Companies that hold copyrights on behalf of creators and which control distribution of creative works have a strong inclination to change the copyright laws from a balanced vehicle for public enrichment to an unbalanced engine of control. Copyright holders traditionally are reluctant to allow new technologies to emerge.

This committee's hearing records are replete with examples of new technologies struggling to survive as copyright holders argue that these new technologies will impede their ability to be compensated for copyrighted works. You and the courts have allowed, over their objections, technological advances like radio, the cassette player, cable television, and the VCR, advances which proved to be a financial boon to these same concerned copyright holders.

Napster can work with the recording and the music publishing industries. We remain enthusiastic about creating a market-based solution that will benefit consumers, artists, and the traditional recording and music publishing companies. Since my first day on the job, I have been reaching out to the major recording and music publishing companies.

In conclusion, I would say that we should not brand as thieves the 20 million Americans who enjoy the Napster service. Instead, we should let history be our guide. Americans love music, and every time a new technology makes it easier for listeners to discover, enjoy and share music, the recording and music publishing industries benefit.

Thank you for your time today.

The CHAIRMAN. Thank you, Mr. Barry.

[The prepared statement of Mr. Barry follows:]

PREPARED STATEMENT OF HANK BARRY

INTRODUCTION

Good morning and thank you for the opportunity to appear before you today to discuss music and the Internet. I am Hank Barry, Chief Executive Officer of

Napster, Inc., and I am here today on the Company's behalf and on behalf of the members of the Napster community.

I am honored to be here today. Both through your jurisdiction and your historical concerns, this Judiciary Committee has been at the center of the great Constitutional debates of our country and the protection of the rights we cherish as Americans. In the coming years, your Committee will continue its important oversight of the laws that govern how we handle delicate copyright issues in the Internet world, and I sincerely value the opportunity to contribute to that endeavor.

Napster is a revolutionary technology based on person-to-person, non-commercial file sharing. It was invented in 1999 by Shawn Fanning, then a college freshman, who is seated behind me today. In less than a year, without any advertising or promotion, Napster has attracted millions of users of all ages and backgrounds, while gathering praise from Internet experts for its technology and contributions to the on-line community. As Andy Grove, former Chairman of Intel, recently stated, "The whole Internet could be rearchitected by Napster-like technology."

We at Napster respect and believe in the copyright laws and the values—both public and private—that they are designed to promote. We believe that copyright can successfully take into account new technologies and innovations, and that Napster and its millions of users throughout all fifty states are operating in compliance with the law. The core issue is not copyright, although the recording and music publishing industry, struggling to overcome its late entry into the Internet economy, is attempting to paint it as such in court. The real issue concerns business models.

My remarks today will address these technology, copyright and business issues.

THE TECHNOLOGY

Two key elements of context are essential to understanding Napster's technology. The first is the current architecture of most Internet information. The second is the technology related to music that is not part of Napster, but which is the enabling foundation that allows Napster and similar architectures to exist.

Congressional support for DARPA was central to the beginning of the Internet. Essentially, the Internet was set up as a redundant communication network among scientists, many of whom were doing defense related work. Using the Internet, they could share that information via a system that would continue to allow communication even in the event a great portion of the physical infrastructure were destroyed.

We have only begun to explore the potential of the Internet for person-to-person communication. With notable exceptions like e-mail, instant messaging and chat rooms, the Internet has largely been used to create an experience for users that is similar to television. We have taken the broadcast tower and replaced it with large computers that "serve" information to the consumer—and we have relegated the personal computer, which is increasingly powerful, to little more than a receiver of text, pictures and sound from the "broadcasting tower" web site. This "client/server" architecture tracks the broadcasting model, but it does not in my opinion take advantage of the fundamentally interactive nature of the Internet.

Concurrently with the adoption of this client/server architecture, developments in computer technology have greatly affected the way millions of people listen to music. Napster contains none of this technology, but without it the Napster community could not exist.

In the early 1980s, Sony and Phillips promulgated the "Red Book" standard for making compact discs. As the recording and consumer electronics companies (and some companies were both) adopted this standard, we moved from a world where analog recordings were published on analog media, such as vinyl records and cassettes, to a world where music is represented by ones and zeros. Since their inception, both the Microsoft Windows and Apple Macintosh operating systems have supported the copying of any digital file, regardless of type. This effectively allowed people to copy CDs onto the hard drives of their computers. However, since the files for a song on a CD were on the order of 40 to 50 megabytes of data per song, this was not at all practical at that time.

In 1987, the Morton Picture Experts Group, an industry standards group that included representatives of the recording and music publishing industry, promulgated the MP3 standard for taking these large digital files and compressing them into smaller files (approximately 3 to 4 megabytes per song). These smaller files could more easily be stored on a computer, processed by a computer and transferred between computers over the Internet. The file is decompressed for listening by "player" software, but because of the compression, the sound quality is not as good as that of a CD.

About four years ago, newly available software applications combined the steps of copying the file from the CD and compressing the file into the MP3 standard for-

mat. At the same time, the average speed of an Internet connection increased. People found that if they had a relatively fast Internet connection, the smaller MP3 file format allowed them to effectively transfer digital versions of sound recordings. They did this via e-mail, so-called FTP file transfer software and many other means. This usage was promoted as an important feature by all the leading Internet service providers.

In sum, the ability to listen to music digitally depends on the ability to copy audio files into a computer, compress them into the MP3 format and transfer them over the Internet. Napster does none of these things. So why all the fuss about Napster?

Napster is an application that allows users to learn about others' musical tastes and share their MP3 files. If they choose to share files—and they are not required to—the application makes a list of the files designated by the user and sends the list to become part of the central Napster directory. The Napster directory is a list of all the files that members of the community are willing to share. Users can search that list, comment on the files on others' computers, see what other people like and chat about all this. If they want to and if the other person is then online, they can share the files designated as “shareable.” This is accomplished by a file transfer from one person's computer directly to another's. They do this for no money, expecting nothing in return, on a person-to-person basis.

That's it. Napster is an Internet directory service. Napster does *not* copy files. It does *not* provide the technology for copying files. Napster does *not* compress files. It does *not* transfer files. Napster simply facilitates communication.

Napster is a throwback to the original structure of the Internet I described above. Rather than build large servers, Napster relies on communication between the personal computers of the members of the Napster community. The information is distributed all across the Internet, allowing for a depth and a scale of information that is truly revolutionary.

The Napster method of person-to-person, non-commercial file sharing is a new tool, a new way of sharing information. All new tools change the way we do things, and that often upsets the established order. In the case of Napster, the established order is the recording and music publishing industry. When presented with this new tool, the industry reacted by attempting to crush Napster, as it has tried to do with other technologies in the past. As it has before, the industry has sought refuge in the copyright laws.

NAPSTER RESPECTS AND BELIEVES IN THE COPYRIGHT LAWS

Napster believes in copyright and its benefits to society. Napster believes that copyright law can work well in the new Internet environment, and foster innovation and technological advances like file sharing, so long as we do not lose sight of what the copyright law is truly meant to protect.

Copyright is a tool of public policy; it does not vindicate a private right. The copyright laws are meant to find the balance between the “embarrassment of a monopoly”—to use Jefferson's term—that we offer to authors in order to encourage their production of works, and the public interest that otherwise would not allow such a monopoly to occur. Copyright is therefore an incentive we as a society grant so that we may have better access to more original expression. In the end, the copyright laws are for the benefit of the public as a whole, not the individual copyright owners. The balance requires that these rights be *limited* so that we as a society can share, grow and build upon one another's creativity. But that balance is always at risk in the struggle between copyright absolutists and those who think more limited protections are appropriate.

Companies that hold copyrights on behalf of creators, and which control distribution of creative works, have a strong inclination to extend copyright into a complete monopoly control over the creative work—to change the copyright laws from a balanced vehicle for public enrichment to an unbalanced engine of control. As a result, copyright holders traditionally are reluctant to allow new technologies to emerge. This Committee's hearing records are replete with examples of new technologies struggling to survive as copyright holders argue that these new technologies will impede their ability to be compensated for copyrighted works.

Faced with these innovations and the copyright holders' protests against them, Congress has repeatedly maintained the correct balance, whether by only granting a limited term for copyright, by codifying the fair use doctrine, or most recently, by recognizing the right of individuals to make digital or analog copies of musical works for noncommercial purposes.

As a result of decisions made by Congress and the courts, technological advances like radio, the cassette recorder, cable television and the VCR have survived copyright holders' attacks and, in the end, proved to be a financial boon to these same

concerned copyright holders. The fact that this is true can be demonstrated by the statement made by Jack Valenti, the President of the Motion Picture Association of America, in the context of the Sony Betamax litigation. At that time he testified before Congress that the VCR was to the movie industry “as the Boston Strangler is to a woman alone.” Sixteen years after Valenti’s statement, the movie industry is thriving as never before. U.S. box office receipts in 1999 reached \$7.5 billion, their highest level ever. All of this in spite of an 85.1 percent VCR penetration rate in U.S. households. By all accounts, the VCR has enormously helped the movie industry, and now accounts for more than half of the industry’s revenues.

It is my firm belief that the consumers who use Napster are *not* committing copyright violations. Let me clarify that point. Nobody, not even the recording and music publishing industry, is saying that Napster is committing direct copyright infringement. Instead, they are saying that the millions of people who use Napster, the hundreds of thousands of citizens in every state, are copyright infringers. It is the fundamental premise of their suit against Napster that, by engaging in the very conduct—music sharing—that the recording and music publishing industry has known about and encouraged for many years, your employees, your colleagues, your friends, your family members and your constituents are violating the law. We disagree, and believe that the vast majority of Napster users appropriately operate in a non-commercial manner within the bounds of the copyright laws. Napster’s view on this issue is based on a review of the copyright statutes, court decisions and the expert opinions of copyright scholars. In that regard, I would refer you to our brief on this subject in opposition to the current preliminary injunction sought by the recording industry’s plaintiffs.

After years of uncertainty surrounding the copying of records for non-commercial use, in Section 1008 of the Copyright Act, Congress sought to clarify that consumers could make copies for noncommercial use without fear of violating copyright laws. Today these same people are flocking to Napster. The music industry should embrace these users for who they are, the industry’s most loyal consumers of music.

Further, even if one were to assume that some Napster users were violating copyright law, Napster would still not be liable for any copyright infringement pursuant to the landmark Sony Betamax decision. The Betamax case recognized that Sony’s offering of the Betamax VCR did not constitute copyright infringement because the Betamax was capable of non-infringing uses, such as copying for time-shifting purposes. Napster allows similar uses. For example, Napster users often transfer an MP3 file onto their hard drive as a complement to a CD they already own. Further, studies show that Napster users share songs as a way to sample music before purchasing it, including music that the user would not normally consider buying. Finally, Napster provides a critical link between new artists and the public. Too much creative talent fails to get through the recording and music publishing industry filter. Lack of recording contracts and radio play should not deny creators from finding an audience. Napster is a great way for fans to find music of artists they read about or hear play at a local club.

TECHNOLOGICAL CHANGE WILL IMPACT THE DISTRIBUTION OF MUSIC

The Internet revolution of which Napster is a part challenges many companies. Often, existing methods of distributing goods and services are at risk of being supplanted by new, more efficient and vibrant Internet-based distribution systems. As a result, businesses try with varying levels of success to adapt to the new environment the Internet economy is still in the process of creating. These existing companies take one of two approaches. Some embrace the new economy and mold themselves into Internet-friendly companies. For example, UPS, FedEx and WAL-MART are all examples of companies with significant pre-Internet market share that are actively adapting to the new Internet environment. Others, however, seek to exploit their position in the existing market to dominate the development of this vibrant new market space. In other words, these companies attempt to protect themselves by keeping down innovative Internet technologies.

That is exactly what is happening here. The recording and music publishing industry has known of the technology for creating and distributing MP3 files for years. Yet they have chosen not to take any actions to stop or even slow this widespread proliferation. Indeed, the recording and music publishing industry actively encouraged this proliferation by forming partnerships with and investing in companies that direct consumers to MP3-encoding software that will enable them to transfer music files over the Internet. They did this because they knew that rather than hurting their sales, as they now claim, MP3s on the Internet in fact help their sales. The recording and music publishing industry’s goal in attempting to crush Napster appears to be to retain control over the flow of competing unsigned artists’ music

into the marketplace, and the means of and business model of distributing music over the Internet.

Despite all this, we at Napster remain enthusiastic about the possibility of working with the recording and music publishing industry to create a market-based solution that will benefit consumers, artists, Napster and the traditional recording and music publishing companies alike. Before my arrival, Napster's attempts to negotiate with the industry were at first seemingly welcomed, but then, while talks were still continuing and without notice, the recording companies sued. Nevertheless, since my first day on the job, I have been reaching out to the major recording labels. Ironically, all this is occurring in an environment of steadily increasing record sales.

Recording industry statistics show that the music business is booming. For example, according to the RIAA, U.S. CD sales increased 11 percent in 1999 to a dollar value of \$12.8 billion, and are up 8 percent for the first quarter of 2000 compared to the same time period last year. These figures discredit a study commissioned by the RIAA in the litigation that attempted to show that sales of CDs near certain colleges from 1997 to 2000 had gone down. That report focused on declining sales at these selected stores over that time period, but failed to take into account the fact that Napster did not even exist until late 1999, and that big box and online retailers probably played the most significant role in any declining sales that may have occurred at these selected college stores.

In fact, numerous studies show that Napster users are more likely to buy CDs after using the Napster directory service. For example, a recent study showed that 28.3 percent of users who have transferred files using Napster have increased their CD purchases, as opposed to only 8.1 percent whose purchases have decreased. In addition, a Pew Foundation report found that people are going out and purchasing music they first sample online. Further, more than half of all users use Napster to sample songs before purchasing them, and 42 percent of these samplers actually purchase more CDs as a result. In fact, one study of college-aged users showed that over 95 percent of all files that are shared between those Napster users are soon erased, supporting the view that Napster is a sampling and listening experience, and not a permanent copying experience that could displace conventional CD sales. The excitement that Napster creates for new and established artists is helping to drive increased sales, reaping even greater profits for the recording and music publishing industry.

Further, far from hurting the creative community, Napster is offering thousands of artists a new and effective distribution system for their work. Last year, the major recording labels released only 2,600 albums. In contrast, in the past four months Napster has signed over 17,000 artists to participate in its new artist program, more than 7,500 of whom reside in the states represented by members of the Judiciary Committee. Through this program and Napster-run chat rooms that allow users to discuss new artists and songs, Napster provides independent artist an inexpensive, alternative method of promotion. In one case, a student at the University of Florida posted his songs on Napster. The ensuing buzz resulted in increased sales of his CD on his own web site, which allowed him to partially fund his college tuition.

In an industry where a few large companies operate as the gatekeepers to the American listening public, artists clearly see Napster as a revolutionary way to gain access to those who would not otherwise have a chance to appreciate their work. Jim Guerinot, an industry veteran who currently owns the Time Bomb recording label and is personal manager for The Offspring, a multi-platinum-selling rock band, has said: "It is the band's and their manager's opinion that allowing fans of The Offspring to hear their music on Napster will make fans more, not less, likely to purchase the group's records, T-shirts and other merchandise, and attend live performances by the band. * * *. The Offspring view Napster as a vital and necessary means to promote music and foster a better relationship with fans."

In conclusion, we should let history be our guide. Every time a new technology makes it easier for listeners to discover, enjoy and share music, the recording and music publishing industry ends up benefiting. In the end, artists, the industry and new technologists will create a solution that benefits consumers, artists, Napster and the recording and music publishing industry. Until that time, however, we believe it would be rash to construe or change existing laws in such a manner as to destroy Napster. To do so would brand as thieves the millions of music lovers throughout the United States who have come together to share and enjoy music on Napster and the Napster community will disappear. I hope you in Congress will watch closely these developments and I thank you for your time.

The CHAIRMAN. Mr. Robertson, we will turn to you.

**STATEMENT OF MICHAEL ROBERTSON, CHAIRMAN AND CHIEF
EXECUTIVE OFFICER, MP3.COM, INC., SAN DIEGO, CA**

Mr. ROBERTSON. Thank you, Mr. Chairman, distinguished members of the committee. Good morning. My name is Michael Robertson. I am the Chairman and CEO of MP3.com.

You invited me here to discuss with you, the members of the Senate Judiciary Committee, the future of digital music and how that future will impact both consumers and artists. I would like to address how music and technology together are making it possible for consumers to access their music anytime, anywhere, on any device, and how companies like MP3.com are taking advantage of new technologies in a responsible way to bring artists and consumers closer together.

I am going to provide a demonstration of our technology. I will also discuss what happened after we introduced our technology, the lawsuits that ensued, the confusion which exists around current copyright law, and how consumers are ultimately losing in the battle between technology and the recording industry.

MP3.com has many parts. Roger talked about how we are the host for 80,000 digital artists today, and we are proud to be that. But what I want to talk about is one of our services, called My.MP3.com. This revolves around our concept of an MSP.

I think I am going to be the only one to risk a live demo here, and hopefully I won't regret it. I want to talk a bit about our concept in MSP. The concept is a very simple one. Because music can be digitized, we can store music digitally. We can take an entire person's music collection, their entire collection, the CD's that they have bought, the music that they have purchased online, and store that. The beauty of that is then those consumers can access that music from anywhere that they are. Last night in my hotel room in Washington, DC, I had with me my music collection, not because I lugged my CD's, but because I had my computer and an Internet connection.

I want to show you this technology. We call it My.MP3.com. So the first thing I am going to do is log in. Each account is password-protected, so each person has their own account which only they can access. The interesting part here is how we made it possible to get the music into this online storage. Music is generally very large, so we had to come up with technology that would make it easy for a consumer to load their music in. We rolled out two technologies to do that.

Perhaps the music that people care most about is the music they have already bought, and so we came out with some software called Beam-It, and I want to show you how that works. A consumer takes an audio CD which they have purchased through traditional means, loads this Beam-It software onto their computer. Once the Beam-It is loaded, they simply enter in their user name and password so that it knows what account is being accessed. Then they take the audio CD, put it into their computer, click a button, Beam-It, and literally 20 seconds later all the tracks from those CD's are available in their online account that they can access from anywhere. And so here is an example where I just beamed a CD for Stevie Ray Vaughn. I will click "play" and that music will load immediately and start playing, we hope.

So, that is an example of a consumer loading their own CD collection into the system. I want to show you another tool that we rolled out which allows retailers to also be included in the process. Today, when you buy a CD online at CDnow, it is not really CD now; it is CDinfourdays.com, because you have to wait for that CD to come in the mail. [Laughter.]

We rolled out technology that includes retailers in this process, that encourages people to buy more music. I am going to buy a CD from Steve Miller here at Djangos, who is one of our retail partners. So I am going to purchase a CD as any online customer would by putting in their credit card, their shipping address. But as soon as this purchase is completed, that Steve Miller CD that I just bought is immediately loaded into my account. I can click "play" and all the songs from that CD that I just purchased are mine to listen to in a digital version while I wait for the physical CD to appear.

That is my favorite one, "Fly Like an Eagle." But you will notice here, Senators, I can click between these songs. This is a virtual CD player. This allows me to access my music not in a radio form, but as a virtual CD player online. That is the core of the My.MP3.com technology.

What I want to do now is go back to what happened after we rolled this technology out. The day we rolled this technology out, we called the music industry and invited them to see this technology firsthand. They sent their attorneys, they sent their technologists to investigate this system, and we encouraged them to do so.

After looking at this technology, they said they felt they had concerns and wanted us to immediately cease the system. We said that we were happy to discuss this, but we first wanted to know a time line and what the issues were. They refused and immediately leveled a lawsuit without so much as a demand letter. From there, it went into the courts.

For us, this is really an issue of fair use. Does a consumer who buys a physical CD have the right to load that into an online service and listen to it? Does a company have the right, like MP3.com, to assist them in doing this? To make this easy, we built a database of CD's to make the upload process quicker, but at the end of the day it is consumers listening to their own CD's.

On to the lawsuit. We lost in the Second Circuit—I am sorry—district court, my attorney tells me. That is why I brought him. The judge did not agree with us that this was fair use, so we immediately voluntarily disabled the system and began licensing talks that were actually going on for some time. We settled with two record labels of the five that are suing us.

We haven't received complete licenses from any of the major record labels. So although we have paid enormous amounts of money, many times more than the largest copyright settlement ever in history, for a system that was up for 4 months that they can show had no damage to them, that, in fact, raised CD sales to all the retailers that supported us, we are still not able to offer that music to consumers.

We requested the license. We have the money to pay, but we have not gotten licensed. There can only be two reasons. One,

money; two, barriers. We are willing to pay, but that isn't the issue, in my opinion. The issue is more about barriers to competition.

While we disagree with the judge's ruling, we are respectful of it and we immediately went working on licenses. But I want to explain to you how difficult this licensing process is. Because the copyright law is vague, because it deals with mechanical and analog realities, moving those to the digital world is sometimes impossible.

To turn on our service, we need the following rights: one, the right to copy the master recording onto a database suitable for streaming over the Internet; two, the right to perform the master recording via streaming over the Internet; three, the right to copy the composition into a database suitable for streaming over the Internet; four, the right to perform the composition via streaming over the Internet; and, five, the right to copy the composition each time it is streamed over the Internet. That is for every song that we want to offer for consumers who have already purchased this music. Clearly, this makes a venue that is nearly impossible for any company to live within.

I think today My.MP3.com presents the industry with a fork in the road. Will licensing bodies work in a free-market environment to license responsible technologies like My.MP3.com or will they use this opportunity to squeeze competitors and consumers?

I have heard this hearing referred to as the Napster hearing. It is not the Napster hearing; it is the consumer hearing. That is what this is about. I would contend that these new technologies are being thwarted or reduced in their ability to roll them out to consumers because of the ambiguities in copyright law.

Completely new applications are impossible to know what licenses are required. For example, we have a license with ASCAP and BMI that pays publishers. Meanwhile, Harry Fox has sued us for billions of dollars. They also collect money for publishers. So you can see in this example there is double-dipping, or even triple-dipping in some instances.

Additionally, the stiff copyright damages that surround these gray areas can potentially wipe out any company for even the slightest infraction over an issue that is very difficult to ascertain. Technology for My.MP3.com is doable today. Yet, there is no service available to the consumer, and that is a shame.

Finally, consumers are paying more for music, not less, in spite of the incredible efficiencies of digital delivery where we should be seeing enormous price decreases. I can't deliver a loaf of bread, I can't deliver a pair of shoes over the Internet, but I can deliver music. We should be seeing great price decreases, but we are not. Digital music is the only industry that is moving to the Internet with higher costs for the consumer.

When a consumer buys a CD, they are now being asked, if it is in digital form, to pay every time they hit the "play" button on their computer. They don't pay every time they hit the "play" button on their home stereo, and they shouldn't have to on the Internet.

So with that, I want to point out that the key to growing the music business, the key to protecting artists, the key to protecting

the music industry is not by charging existing customers more and giving them fewer options, but by growing the entire business by offering more options to those that pay. This is about making the pie bigger, not about charging more for each slice.

What is needed is a business landscape which encourages experimentation without a long list of companies simply seizing an opportunity to garner a potential economic windfall on the backs of entrepreneurial companies, or worse, block their entrance into the market entirely.

What we ask from you, the committee, is clarity, clarity for the consumer. What can the consumer do with the music that they have bought and own outright? We encourage this committee, as well as other Members of Congress, to continue this dialogue. By encouraging innovative technology advances, by encouraging all parties in the digital music space to work together to embrace free-market enterprises which will drive this to a new level, will help consumers in this battle.

Thank you for your time.

The CHAIRMAN. Thank you, Mr. Robertson.

[The prepared statement of Mr. Robertson follows:]

[Additional material is being retained in the Committee files.]

PREPARED STATEMENT OF MICHAEL ROBERTSON

INTRODUCTION

Mr. Chairman, distinguished members of the Committee, good morning. My name is Michael Robertson, and I would like to thank you for your invitation to testify before the Committee. You have invited me here today to discuss with members of the Senate Judiciary Committee the future of digital music and how that future will benefit both consumers and artists. I would like to address how music and technology together are making it possible for consumers to access their music anywhere and at anytime. Also, how companies like MP3.com are taking advantage of new technologies to bring artists and consumers closer together by providing a demonstration of the My.MP3.com service. I will discuss what happened following the introduction of My.MP3.com and the confusion which exists with current copyright law. Lastly, I would be pleased to engage in an open discussion of how the respective constituencies can work together to the benefit of both consumers and artists. Let me first begin by talking about my company, MP3.com (<http://www.mp3.com>) and the My.MP3.com service.

MP3.COM—THE COMPANY

I am here representing MP3.com as its chairman and chief executive officer. Since the founding of the company, MP3.com has been dedicated to becoming the premier Music Service Provider, or MSP, which I will describe in greater detail later in this testimony. While the company's vision has evolved since its beginning in 1998, today it is to make digital music accessible to consumers on any net-connected device. In the near future, home and car stereos, cell phones, PDA's and other devices not yet imagined, will access the world's largest fully interactive database of music in an easy and seamless manner.

Currently, more than 74,000 artists and over 469,000 songs and audio files are posted to our web site. These numbers continue to grow with an average of over 100 artists and more than 1,000 songs and audio files added daily.

BEING A MUSIC SERVICE PROVIDER

Music Service Provider (MSP) is a term MP3.com coined last year to describe a significant new sector of the music business in which a personal music library is delivered to users anywhere over any net-connected device. Just as an ISP provides access to the Internet, an MSP provides access to music. Imagine being able to listen to your music collection from your desktop at work, any room of your house via your home network, portable devices like your phone or Palm Pilot, and even in your hotel room via an Internet connection. The proliferation of bandwidth, PC pen-

etration and portable devices is quickly giving way to the demand for music anywhere. As an MSP, we are dedicated to enhancing and improving our infrastructure which has been designed to allow consumers to instantly discover, listen to, freely download, buy, store and organize their favorite music online. We are partnering with other technology companies to satisfy consumers' desire to enjoy their music anywhere and at anytime. *Our MSP model is great for music lovers, a blessing for artists and a necessity for growing the music industry.* An MSP manages all of your personal music digitally and, because it is stored on the net, allows it to be delivered to any net-connected device—making music more versatile, portable and valuable than ever before.

In January of this year, we rolled out some of the first MSP services to all music fans on the net.

My.MP3.com represents a complete relaunch of our My.MP3.com service that lets users store, manage and play back virtually their entire music collection from any web browser. Sorting albums and artists, creating playlists, and streaming music in Lo Fi or Hi Fi are just a few of the features available via a personal account.

Instant Listening gives consumers the ability to buy a physical CD online and instantly listen to that CD. This innovative service gives instant gratification a whole new meaning. When purchasing CDs from MP3.com's e-tailers, all tracks from the CD are made available in a user's password-protected MY.MP3.com account. Consumers can instantly enjoy the tunes they just purchased while waiting for the post office to deliver the plastic disc.

Beam-it is a technology that makes it a snap to move CDs you have already purchased into your My.MP3.com account. Once the Beam-it technology is installed, any time users place a CD into their CD-ROM drive, they will see a polite window offering to "beam" their CD to their MY.MP3.com account. Ten to 60 seconds later, the tracks are available. In addition, visitors to MP3.com can select any of the more than 469,000 tunes, which have been authorized by the content owners, from our web site and add them to their catalog with a just a click of the mouse.

In offering these new features to consumers, we built-in extensive security hurdles, creating a system that encourages positive behavior. To gain access to the music, users must represent that they own the physical CD. All of the accounts are password-protected, so the music in one account is not available to another account. Also, if we detect multiple users on the same account, we can terminate the users of that account entirely.

EXISTING LAWS AND THE INTERNET

As you can see, the Internet and the technological applications applied to this new medium are both exciting and dangerous. It's exciting when consumers can access their paid-for music and all new free music offerings effortlessly on any Internet-connected device such as cell phones, Palm Pilots, home and car stereos (to mention just a few) and enjoy their music in new ways. It's exciting when, for the first time, a digital artist has access to a marketplace without an intermediary. This is good for artists—it allows them to gain access to a marketplace that was heretofore denied them. This is good for consumers because this new medium allows for individual diverse and vast choices of music that cannot be heard anywhere else. It is also exciting because, with commercial music available on the Internet, new complimentary sources of revenue can be had for all to benefit.

Now for the dangerous part—with the vast consumer demand for popular music on the Internet, we face an immediate and critical time that I believe requires immediate governmental intervention. Without this intervention, the potential for "lawful" music on the Net may very well die, and we will be left with demand continuing to seek and find illicit supplies of music. What I mean by intervention is clarity for the consumer and simplicity for the technology company. Today, MP3.com is faced with a very frustrating and apparently futile challenge—the challenge to make music (that people already own) available for storage and retrieval on the Internet without running afoul of multiple parties claiming rights and control over that music.

What is at issue are consumers' rights. The rights of consumers to listen to, manage, and share their music—music they already own. Because of current legal and regulatory roadblocks, as well as existing and outdated copyright provisions, consumers are caught in a quagmire of bureaucratic regulations and prevented from enjoying music in ways never before imagined.

Let us again take a look at what MP3.com did that caused all of the uproar. We created a system that required as the price of admission to the My.Mp3.com service that the consumer had in their possession a physical CD. If the consumer did not have a CD, there was no way to access this system. Unrelated parties at Rice Uni-

versity intentionally and formally tried to hack into our system for access without a CD. In every case, this access was denied. Respectfully, I remind you that these CDs were already bought and paid for by a consumer. Further, the various rights holders have been compensated upon that purchase. If now the law tells me as a technology company that MP3.com must ensure that the various rights holders are to be paid yet again, we can live with this. However, look at the landscape that Internet technology companies now apparently find themselves in. From what the courts and other interested parties are telling MP3.com, in order to allow consumers to listen to their CDs at their discretion, the technology company has to separately negotiate for: (1) the right to copy the master recording onto a database suitable for streaming over the Internet; (2) the right to perform the master recording via streaming over the Internet; (3) the right to copy the composition into a database suitable for streaming over the Internet; (4) the right to perform the composition via streaming over the Internet; and (5) the right to “copy” the composition each time it is streamed over the Internet—and that’s with respect to each separate song put on the Internet.

It seems only fair, prudent and utilitarian that we should be required to only negotiate one royalty for the use of one song. Today, we have (at great expense) procured a performing rights license for all content, a master recording license for much of the content, and we are still faced with the prospect of all of this for nothing if we cannot get a publishing license. How can any company, or any consumer, for that matter, have hope that their music will be lawfully available on the Internet if the service provider must first negotiate with three different parties and then have to negotiate with potentially thousands more in order to become an infringement-free company. This, as you can see, is futile and puts consumers in the position to fill their needs only one way and that is via a systemless, licenseless, lawless copyright-trampling outlet, many of which you are seeing today. And they have just begun.

Now, as for clarity—consumers look to you to provide clear understanding of the parameters under which personal property can be used. Never before in history has there been such a fog surrounding what a consumer can lawfully do with their music. I do not have the answers, but I do know the questions: Can I play my music over the Internet? Can I store my music using a music service provider without fear of shutdown? Can I stream my music to my cellphone? How about to my Palm Pilot? Where do my rights start, and where do they end? What do companies that I need to help me access these rights have to do so I know they are lawful companies to choose to help me?

Today, MP3.com respectfully requests that answers to these questions for the consumer along with common sense and ease of the content licensing process be addressed as soon as practical.

THE BUSINESS MODEL

The ability to listen to a personal music collection from anywhere on the Internet is a monumental advancement for consumers. The benefits for artists, while more subtle, are no less dramatic and something that artists and rights-holders should welcome with open arms. Using the My.MP3.com technology as springboard, we laid the foundation for new revenue sources that will grow the business.

For example, much of the current digital music opportunity on the Net centers around offering music wrapped in advertising, much like network television (NBC, ABC, CBS). Today, MP3.com’s “Payback for Playback” model is attracting and rewarding artists for giving away their music on the Internet, with some artists making up to \$20,000 per month based on the popularity of their music. The “Payback for Playback” fund pool is generated through advertising revenues.

In addition, consumers currently pay a subscription fee for many services, including TV (cable), film (premium channels), Internet access, phone and cellular access, which creates a valuable, steady stream of ongoing revenue. The obvious missing item is music. My.MP3.com illustrates how music can be transformed into a digital service whereby users can store their music on the Internet. Here they can sort, create playlists and access their music not only from their personal computer, but eventually from any digital device with Internet access, including cell phones, Palm Pilots, etc. A subscription system has the potential to double the music business, just as cable TV grew the film business to more than double its previous revenues. It’s important to note that this revenue stream is in addition to CD sales as the subscription system complements CD sales. In May, our first subscription channel was introduced—the Classical Music Channel—and offers classical masterworks for a monthly subscription fee of \$9.99. The Classical Music Channel provides unlimited streaming access to more than 4,000 tracks and over 300 free downloads from the

collection. Other channels slated for release include alternative, jazz, children's, urban, world and more.

CONCLUSION

As the leader in the digital music space, we have employed technology to build new delivery methods for music fans and new revenue streams for artists. Today, at MP3.com, we have two main objectives:

(1) Continue to build the infrastructure that *creates an easy and convenient way for consumers worldwide to discover, listen to, download, interact with, manage and purchase music*; and

(2) Grow the music business through new revenue models such as advertising and subscriptions, which will benefit *individual musicians, record labels and other companies in the digital music business*.

MP3.com will continue to be a force in shaping the future of digital music delivery and distribution. At the heart of MP3.com has always been a vast technology infrastructure that can accept, structure, manage, move and report massive amounts of data. By executing on our MSP strategy, we are building the infrastructure to deliver music to any device, anywhere and at anytime. Along the way, we are dedicated to making the music business a better place for consumers and artists.

We encourage this Committee, as well as other members of Congress, to continue their dialogue on this issue. By encouraging innovative technological advances in the online digital music space and creating clarity of both law and licensing procedures, consumers, rights-holders and artists worldwide will win. Please help create clarity and stability in this space.

Thank you for your time.

The CHAIRMAN. Mr. Ehrlich, we will turn to you.

STATEMENT OF FRED EHRLICH, PRESIDENT, NEW TECHNOLOGY AND BUSINESS DEVELOPMENT, SONY MUSIC ENTERTAINMENT, INC., NEW YORK, NY

Mr. EHRLICH. Thank you, Mr. Chairman. My name is Fred Ehrlich and I am the President of New Technology and Business Development for Sony Music Entertainment. This committee has always been on the cutting edge of technology and intellectual property issues, and I thank you for holding this hearing.

There is no longer any doubt that the digital revolution will radically change the way that artists create and consumers enjoy copy-righted works. We in the music industry think this is a great thing. These new opportunities pose great challenges, both to traditional copyright law and to certain longstanding business models of how music is created and enjoyed. I am glad to say, however, that the music industry is ready to meet these challenges. Let me give you an example from my own company.

At Sony Music, we established a New Technology and Business Development Department more than 6 years ago. Its charter is to review, evaluate and, where appropriate, enter into partnerships with digital technology companies. Sony Music is committing hundreds of millions of dollars to develop these new technologies, and we are at the same time licensing our content to more and more legitimate distribution companies.

When you buy a CD today, you are, in fact, acquiring a product that represents the creative contributions of a complex chain of players, a value chain, if you will, that constitutes the music industry. The price you pay for your CD flows back through the chain to compensate each and every one of the contributors involved in the production of that sound recording.

Music companies were among the first to use the Internet to market and promote our recordings online. Some of our earliest ef-

forts at Sony Music included artist chats and making available samples of new music, tour dates, and up-to-the-minute artist information on our promotional Web sites. The goal was to allow consumers to communicate directly with the artists they love.

Music companies and our recording artists were eager to use the Internet to distribute music. As early as 1997, we began what we call online music distribution, where a consumer orders product online and the product is delivered via mail in physical format. This was just a start, but we wanted to start to take the next step; that is, to deliver the music digitally.

The music industry has now enthusiastically entered the world of digital distribution and it is testing a wide variety of new business models. One key feature in these new models is greater consumer choice. Another is maintaining and even exceeding the high level of quality that our music consumers have come to expect.

We in the music industry firmly believe that at least some of these new, innovative distribution methods will provide the path to the future of the music business. Some of these new models include streaming transmissions in which the sound recording is transmitted to the consumers, but not in a downloadable format—we have been providing live Internet broadcasts of our artists' concerts since 1997—and subscription models that allow record companies to offer tiered services in both the streaming and downloadable format to more closely match customer preferences. Cyber lockers offer consumers the ability to store their music remotely and to access their music wherever they are and whenever they want.

A number of major labels have licensed their repertoire for use in creating customized CD's. Also, a number of major labels, including Sony Music, hope to offer music via kiosk. These kiosks will allow consumers to access a far greater reserve of available product to purchase, especially our back catalog. And every major label has announced plans to begin digital downloads of music.

At Sony Music, we are making our music available in downloadable format not only on our own Web site, but on some 40 other sites, and are continuously looking for more and more places to take our music to consumers. We are constantly exploring new options for downloading music to digital lockers, personalized radio, and bundling tracks on hand-held devices, to name but a few.

All of this is just the tip of the iceberg. It is my job at Sony Music to explore new business models aimed at getting our music to the e-marketplace. I assume other labels have a similar agenda. We are doing all this in partnership with technology companies of every size and shape, large and small, in the new digital music space.

We view digital distribution as offering ways to expand the value chain associated with music, while also offering ease and quality and choice for the music fan. If in the future this value chain is not honored and compensation declines, it will be very difficult to sustain the level of investment involved in developing music, and that would be a shame both for the artistic world as well as for the consumer.

All we ask is the continued application of copyright law to ensure a system that respects and protects music rights in cyberspace. We

believe that a legitimate system of the protection of rights sets off a domino effect for true e-commerce where creators of technology, creators of music, and the consumer all benefit.

I have absolutely no doubt that a breakdown in that protection of rights would result in the lack of any incentive for anyone in this value chain to continue. It is our view that the opportunities we see will outweigh and outlive the challenges. The music industry is ready, willing, and able to use digital technology to bring music to consumers in evermore creative ways.

Thank you for the opportunity to appear before you today. I would be happy to answer any questions you might have.

The CHAIRMAN. Well, thank you.

[The prepared statement and an attachment of Mr. Ehrlich follow:]

PREPARED STATEMENT OF FRED EHRLICH

Mr. Chairman, Senator Leahy, and Members of the Committee, my name is Fred Ehrlich, and I am the President of New Technology and Business Development for Sony Music Entertainment Inc. Sony Music is a leading global producer, manufacturer, and marketer of recorded music, video, and music publishing, headquartered in New York. Sony Music employs over five thousand people in the United States in our many record labels (which include Columbia and Epic), and at our four disc manufacturing plants and our state-of-the-art recording facilities in New York, and generates significant U.S. revenue from our record and music publishing businesses worldwide. I am here before you today representing The Recording Industry Association of America, the trade association of America's record companies. The RIAA's member record labels range from large companies with major distribution systems to small independent companies who average just a few recordings a year, and are responsible for producing and distributing over 90 percent of the legitimate sound recordings sold in the United States.

This Committee has always been on the cutting edge of technology and intellectual property issues, and I thank you, on behalf of Sony Music and the recording industry, for holding this oversight hearing today.

There is no longer any doubt that the digital revolution will radically change the way that artists create, and consumers enjoy, copyrighted works. We in the music industry think this is a great thing. The digital world opens up an almost unlimited number of opportunities for the public to experience music in ways that were never imagined before. Of course, these new opportunities pose great challenges both to traditional copyright law and to certain long-standing business models of how music is created and enjoyed. I am glad to say, however, that the music industry is ready to meet these challenges. In fact, we have a long history of embracing and developing the new digital technologies, including, for instance, our adoption of the compact disc format in the mid 1980's.

Today, I hope to explain to the Committee some of the ways in which the music industry has employed digital technologies to expand the ways we bring music to consumers. I will also try to predict, to the extent that anyone can, some of the ways we expect to even further revolutionize the creation and enjoyment of music via the Internet, broadband, and other digital technologies. First let me outline, in broad strokes, what is involved in bringing a piece of music into the marketplace from the date of inception to the moment the first consumer has it in hand—to describe the “value chain,” as it were, involved in delivering new music to the marketplace.

When you buy a CD today, you are in fact acquiring a product that represents the creative contributions of a complex chain of players, coordinated by the record label, that constitute the music industry. There are obviously many different creative combinations starting with a singer songwriter or a band that writes their own music like Metallica, but the creative chain may also begin with a songwriter (or team of a composer and lyricist) who puts together the words and music for a new song. The record label and its recording artist work with that songwriter's music publisher to fit the right song with the right artist. The recording artist will then go into a studio to record the song, joined by an array of background musicians and vocalists, and a team consisting of a record producer, studio engineers, mixing engineers, and others. Meanwhile, the record company creates the graphics and album art for what will become a CD in a jewel box. The record company finances the re-

cording of the song and all of the other songs on the album, secures all worldwide rights for the album, and manufactures the CD.

Now the work of getting it into the consumer's hands begins—the promotion and distribution. The record company promotes and markets the album throughout the world, working closely with domestic and international broadcasters, music video channels, retailers and other distributors. With the advent of new digital distribution technologies, we now have a whole new range of venues where we can bring our music to music fans: these include our own websites; those traditional record stores having an online presence; and a vast array of online destination sites such as AOL and Launch.com.

New digital delivery channels open the door for new entrepreneurs to help deliver our music in ever more innovative ways to consumers. These new participants in the music value chain include companies that:

- digitize and compress our music to maintain the sound quality consumers have come to expect from Sony Music;
- encrypt our music and maintain digital rights management systems to protect the work from theft;
- create identifiers such as watermarks to preserve the integrity of the work and the identity of its author;
- constitute an ever-expanding network of retailer/affiliates to offer our music for sale;
- serve as financial clearinghouses for transactions such as credit card, micro-transaction, debit card, and electronic wallet transactions;
- support the development of secure software/hardware players on which our recordings will be played; and
- support customer service and tech support.

The price you pay for your CD flows back through the chain to compensate each and every one of the contributors involved in the production of that sound recording. It is primarily the responsibility of the record label to effectuate that flow of monies. As you might imagine, it is extraordinarily costly for a record label to acquire talent, record, promote, market, manufacture, and sell recorded music.

Our experience over the past years of music-making is that only a very small minority of recordings are profitable. For every artist embraced by the marketplace (the artist whose tunes you recognize, whose songs get played on the radio, whose records get sold in the stores), there are many more for whom the investment will never be recovered. It is the relatively few hits that fund all of the investment in new music. I am not trying to say that one can't make money in the music industry. In fact, we can, and do, and hope to continue to be profitable. I am saying, however, that every record made requires compensation to a large number of individuals, whether or not the record is successful. And the reason that record companies have been willing to pursue this business model—a model that has worked, year after year, to bring America and the world a steady stream of new talent and great music—is our certainty that we will enjoy the benefits of success. A certainty that, when the marketplace likes what we produce, we will get paid for our work and our goods. That certainty, so critical to the model, is rooted in the Copyright Law. When someone buys a CD, it is the Copyright Law which assures that everyone in the value chain gets their share.

With this framework in mind, I would like to highlight for the Committee some of the ways in which record companies have embraced the digital technologies for many years.

As far back as 1994, music companies were among the first to use the Internet to market and promote our recordings online. At Sony Music at that time, part of our job was evangelizing to our artists. Not only we were not afraid of the Internet, but we were actively encouraging our artists to take advantage of some of the Net's earliest opportunities. For instance, Sony Music's online website, which included artist biographies and unique content as well as samples of current music, was launched in 1995. Our artists found online promotion to be an exciting tool which empowers music fans to communicate directly with their favorite artists. A number of record labels, including Sony Music, also began to use online websites to find unsigned new bands. At about this time, record labels also began to experiment with new formats on which to present our artists' music, such as the "enhanced CD" format which allowed us to include, along with a standard audio CD, photos and other materials selected by the artist to enhance the consumer's experience of the music. Also at this time Sony Music created customized CD's which were bundled with new personal computers sold by IBM, Toshiba, Sony, Packard Bell and others. Our goal in these early endeavors was to encourage artists and their fans to embrace the emerging Internet and digital technologies to enhance the music experience.

From the outset, music companies and our recording artists were eager to use the Internet to distribute music. As early as 1997, we began what we call “online music distribution,” where a consumer orders products online and the product is delivered via mail in physical format. This was a start, but we wanted to take the next step; that is, to deliver the music digitally. We identified several hurdles, including slow access to the net, which made it difficult for us to quickly transmit even small sound files; an early lack of Internet penetration among American consumers; inadequate compression technologies for the truly high quality recordings our consumers have come to expect from us; and the need for digital rights management and security technologies.

While time and technology are addressing the first three challenges [modem speed, Internet penetration and compression technology], the music industry has taken and continues to take the lead in solving the fourth: the need for a secure transmission method. We helped recruit IBM and other record labels to launch a trial digital download program called the Madison Project. The Madison Project enabled us to test a rights clearinghouse system. In a more fundamental way, it helped open the eyes of record labels and their technology partners to the practical complexities of making digital download a reality, from encoding our music, digitizing the album artwork, clearing rights, securing the transmission, and working out such logistical puzzles as how a consumer could print out our CD packaging and liner notes on a standard home printer. Perhaps most importantly, the Madison Project enabled us to learn from the feedback of the trial participants about the ease of use of the system, and the quality of the music experience.

At about the same time, under the aegis of the Recording Industry Association of America, the worldwide music industry launched a collaborative effort with the global consumer electronic and information technology industries to develop an open standard for secure music distribution online, which came to be known as the Secure Digital Music Initiative, or SDMI. Thanks to those efforts and a level of extraordinary cooperation among more than 200 companies in the music, consumer electronics, and information technology industries over a relatively short period of time, specifications have already been written for SDMI-compliant portable devices, and several compliant portable playback devices have already been brought to market. The SDMI group is now working to move beyond portable device standards to issue written specifications for all aspects of digital music use.

In parallel discussions, similar intra-industry groups are currently working towards the establishment of standards for a new generation of CD device which is both compatible with current CD players, but is secure (that is, that includes digital watermarking and encryption to protect the integrity of the recordings).

Now that some of these initial hurdles are being resolved, the music industry in the United States has enthusiastically entered the world of digital distribution. Inspired by the potential of digital delivery to allow music to be created and distributed without physical package, and to reach music fans more directly with the music they love best, we plan to test a wide variety of new business models. One key feature in these new models is greater consumer choice. Another is maintaining and even exceeding the high level of quality that our music consumers have come to expect from our industry. We in the music industry know that some of these new business models may prove successful, and some will not. We firmly believe, however, that at least some of these innovative new distribution methods will provide the path to the future of the music business. Some of these new models include:

- *Streaming Transmissions:* A number of major labels, including Sony Music have licensed their repertoire in the so-called “streaming media” format in which the sound recording is transmitted to the consumer but not in a downloadable format. These streams may be promotional or for sale.

- *Webcasting:* This already thriving business is one in which consumers enjoy a new form of on-line radio with music more directly targeted to their genre likes and preferences. These are operating because of the encouragement of the DMCA.

- *Live Streams:* We have been providing live Internet broadcasts of our artists’ concerts since 1997. Many other labels are doing the same.

- *Subscription Models:* Subscription models allow record labels to offer tiered services, in both the streaming and downloadable format, to more closely match consumer preferences. These services might be delivered through a variety of playback media, including digital TVs and wireless and other portable devices. For instance, a monthly fee might allow you to enjoy all of the music and video from your favorite artist, with access whenever you want it, and perhaps access to special chat rooms. A number of major labels, including Sony Music, have announced that we will soon be offering subscription services.

- *Cyberlockers:* Warner and BMG are licensing MP3.com, BMG is licensing MusicBank, and Sony Music is in active discussions with similar companies, to offer

consumers the ability to store their music in “cyberlockers” and to access their music wherever they are and whenever they want.

- *Customized CDs*: A number of major labels have licensed their repertoire for use in creating customized CDs. For example, EMI sold a Beastie Boys 2-CD package; the first was new material from the band, and the second was a customized disc made specially for each purchaser of that buyer’s favorite Beastie Boys songs.

- *Kiosks*: A number of major labels, including Sony Music have entered into partnerships with companies to offer music via kiosks in traditional and non-traditional outlets, from records stores to train and bus stations and fast-food restaurants. These kiosks will allow consumers to access a far greater reserve of available product to purchase—especially artists’ back catalogues—than would normally be available in most stores.

- *Digital Downloads*: Every major label has announced plans to begin commercial digital downloads of music. At Sony Music we are already online with this new program; EMI is scheduled to launch in about a week; and all of the other major record companies are slated to begin operations in the near future. In addition, over the years we have offered numerous promotional digital downloads, designed to enhance our marketing efforts and mindful of our obligations to artists like Lars.

We are constantly exploring new options for downloading music to digital lockers, personalized radio, and bundling tracks on hand-held devices, to name a few. Many of us are out there on the edge, literally, trying to find new and better ways to deliver our music. But all of these final decisions must be guided by sound business practices.

All of this is just the tip of the iceberg. I oversee these efforts at Sony Music, where we have established an entirely new division dedicated to exploring new business models aimed at getting our music to the e-marketplace, and I’ve got to assume that our competitors are doing the same. We’re doing all of this in partnership with technology companies of every size and shape, large and small, in the new digital music space and our goal of a high quality music experience for our consumers.

But let me state here and now that none of us at this table can predict with any certainty what the digital music marketplace will look like a year from now, let alone a decade from now. There are new developments almost daily in transmission and distribution technologies, and those developments influence our decisions. My company made a conscious and early decision to work with a wide variety of companies in these fields. In addition to our strategic partnerships with technology companies, we also are funding some of these companies’ efforts to address some of these technological challenges.

As to the best way to deliver our music to the consumer: It must be easily found by and easily delivered to the consumer. It must be delivered in a secure fashion, protecting the consumer in the transactional phase and the quality of the artist’s performance in the transfer process, living up to the obligation to all parties in the value chain. And it must ensure that music consumers will continue to enjoy the great music experience they have come to expect from the music industry. We view the digital world as offering exciting new opportunities to expand the music value chain while also offering ease and quality and choice for the music fan. If, in the future this value chain is not honored, and compensation declines, it will be very difficult to sustain the level of investment involved in developing music.

And that would be a shame both for the artistic world as well as for the consumer. It’s our view that the opportunities we see will outweigh and outlive the challenges.

Let me be clear. The music industry is ready, willing and able to use digital technology to bring music to consumers in ever more creative ways. We have the best artists in the world, are witnessing continued technological advancements, and we continue to seek out new strategic partners who will help us do so. All we ask—and it seems fairly basic—is the continued application of copyright laws to ensure a system that respects and protects music rights in cyberspace. We believe—in fact, this belief is at the core of our business—that a legitimate system of the protection of rights sets off a domino effect for true e-commerce, where creators of technology, creators of music, and the consumer all benefit. It is that system which has made the creative and intellectual output of the United States the economic leader in the world. I have absolutely no doubt that a breakdown in that protection of rights would result in the lack of any incentive for anyone in this value chain to continue. That surely is not the intent of the Copyright Law nor is it in the interest of public policy.

Thank you for the opportunity to appear before you today. I’d be happy to answer any questions you might have.

Attached is a summary prepared by the RIAA of some of the pending litigation on cases that may be of interest to the Committee.

SUMMARY OF PENDING LITIGATION BY RECORD COMPANIES AND ARTISTS

MP3.COM

On January 21, 2000, record companies filed suit against MP3.com for copying 45,000 copyrighted CDs onto computer servers as part of new services called Instant Listening and Beam-It. These services are designed to allow users to listen to their CDs anywhere they have an Internet connection. With Instant Listening, when a user buys a CD from an online retailer partnered with MP3.com, that user can choose to have the album immediately put into his or her MP3.com “locker” for immediate listening. With Beam-It, when a user puts a copy of a CD into his or her ROM drive, MP3.com will put that album into that user’s MP3.com locker. But, users are not actually copying their CDs into their MP3.com lockers. Instead, MP3.com is giving those users access to a digital music library of over 45,000 albums that MP3.com had previously created. On April 28, 2000, Judge Rakoff issued an order granting “summary judgment” to the plaintiff record companies. This means that MP3.com’s reproduction of tens of thousands of CDs into a database without authorization constitutes copyright infringement, and is not a “fair use.” The judge issued a written opinion which is available at www.riaa.com.

NAPSTER

On December 6, 1999, record companies brought suit against Napster because it launched a service that enables and facilitates piracy of music on an unprecedented scale. At any single point in time, hundreds of thousands of users may be logged onto Napster offering millions of pirated sound recordings. Napster has built a system that allows users who log onto Napster’s servers to obtain MP3 music files that are stored on the computers of other users who are connected to the Napster system at the same time. Napster provides advanced search capabilities, as well as direct hyperlinks to the MP3 files housed on its users’ computers. Based on sampling by record companies, close to 90% of the MP3 files offered on Napster are infringing—and we believe Napster knows this and even encourages it. Napster is thus enabling and encouraging the illegal copying and distribution of copyrighted music. Napster has claimed that they are simply facilitating noncommercial fair uses of works. That is not the case. There is a big difference between a consumer making a copy for his or her own personal use, and that same consumer making the file available on Napster where it can be freely downloaded by thousands of people. Not even the staunchest proponents of consumer rights have suggested that the latter is fair or lawful. Napster’s service is unfair to the artists and musicians who have invested time and effort to create music. It is illegal, and wrong. It is also a deterrent to record companies who are embracing new technologies that enable faster, easier, and wider distribution of music on the Internet. Record companies are actively involved in the development of new Internet business models.

In June 2000, the court ruled that Napster did not qualify for an exemption under the Digital Millennium Copyright Act from liability for copyright infringement based on the fact that it claimed to be a “mere conduit.” The court found that Napster is not merely a conduit under the DMCA for copyrighted works. Judge Patel’s decision on this issue can be found at www.riaa.com. Therefore, Napster cannot shield itself from liability if it is found to have contributed to piracy. The hearing on the record companies’ request to prevent Napster from contributing to the infringement of our works will take place on July 26, 2000 in the U.S. District Court for the Northern District of California.

MP3BOARD

On June 23, 2000, the record companies brought suit against MP3Board for contributing to the infringement of our copyrighted sound recordings. MP3Board is an extensive and egregious link site that facilitates widespread copyright infringement on the Internet. The website has knowingly constructed a business from thousands (or more) of links to illegal sound recordings on the Internet. Essentially, they run an ever-expanding clearinghouse for illegal music in an effort to create “one-stop-shopping” for anyone looking to steal music. MP3Board not only posts these illegal links—which is bad enough—but they take an active role in fostering the site’s illegal offerings. For instance, they encourage site visitors to post their own infringing links and to download infringing files posted by others. They assist in finding specific copyrighted sound recordings at the request of users. They separate many of the links into various genres for easy searching. Likewise, they provide a step-by-step online tutorial that teaches visitors how to find and download infringing sound recordings.

The record companies do not oppose the concept of hyperlinking, any more than we oppose the concept of MP3 compression technology. Both of these represent useful technical tools that can offer great social benefit when used properly. We are opposed, however, to the use of such tools by MP3Board to knowingly create a business founded substantially on our intellectual property. This case isn't about hyperlinking; it's about a corporate defendant that is profiting from the deliberate facilitation of copyright infringement.

The CHAIRMAN. Mr. Hoffman, we will take your testimony.

**STATEMENT OF GENE HOFFMAN, JR., FOUNDER, PRESIDENT
AND CHIEF EXECUTIVE OFFICER, EMUSIC.COM, INC., RED-
WOOD CITY, CA**

Mr. HOFFMAN. Mr. Chairman, members of the committee, thank you very much for having me here. I want to enter my written testimony into the record and go directly from my notes here.

The CHAIRMAN. Without objection, we will put it in the record.

Mr. HOFFMAN. Thank you very much, sir.

First of all, let me tell you a little about Emusic. I am Gene Hoffman, the President, CEO, and co-founder of Emusic.com. We run a downloadable music service, and also the Rollingstone.com Web site. But we are the leading seller of downloadable music online. We sell songs for \$.99 a song or \$8.99 an album. We have sold nearly 2 million MP3's since inception, and it is music from people like Green Day and Bush, Phish. Mel Torme might be a better person for this crowd.

Senator LEAHY. Oh, come on. [Laughter.]

Senator FEINSTEIN. Now, now.

Senator LEAHY. Oh, come on.

Mr. HOFFMAN. Senator Leahy, we do have Phish, so we make sure we take care of you.

Senator LEAHY. OK.

Mr. HOFFMAN. It is kind of funny because I sit up here wondering if I should get sued, being the only Internet company on the panel who hasn't been sued. I am kind of proud of the fact that we have, since inception, licensed all the music we have offered for sale, paid royalties to songwriters, artists, and labels throughout the entire period.

In fact, we were the first company to ever get what is called a digital phono record delivery license, which is a really fancy term from the Digital Millennium Copyright Act, and the 1995 Act as well, that talks about what it is to sell a downloadable file. The interesting thing is, in the face of all this technological change and all of the supposed threats to copyright, downloadable music sales continue to increase off of our site. We currently offer 120,000 MP3 songs from approximately 6 to 7,000 artists.

I want to make three main points and then I would look forward to questions later. First of all, one of the important things to consider as you look at the digital music debate is, frankly, somewhat of a balkanization of a lot of the different issues here. We are in an era of prohibition. Basically, what consumers want really badly is the world music recording catalog in a format they care for that is really easily compatible with portable devices, like the Creative Nomad which I have here. It is a little portable Walkman that has no moving parts and holds an hour's worth of music.

This is interesting, this is really kind of fun. The really compelling ones are ones that hold 150 albums' worth of music. Literally, in my briefcase, I have most of my music collection that I care about, and when I am over in Nevada later this afternoon on the way back to California, I will be listening to it. That is a compelling change in how music is used. I know most of you probably have CD changers in the back of your car, and while mine has the same six CD's in it from about 6 months ago—it drives me nuts—having my entire collection with me is why this matters.

Now, again, as I said, it is prohibition. You have got a lot of consumers doing frankly behavior that is not exactly the highest esteemed behavior we would hope from the American constituency. But we actually trust customers. We think if you give customers the opportunity to do the right thing, to pay a reasonable price for exactly what they want, they will. And customers have voted with their pocketbooks. Again, we have sold nearly two million MP3 files so far.

The real issue about copyright piracy or illegal copying, or whatever you want to call it, is scalability. Everyone has always had the ability to make illegitimate copies of copyrighted material. In fact, that is why copyright law exists. Copyright law was a reaction to technology; it was a reaction to the printing press. People somewhat forget about the fact that copyright law is actually a law all about technology, and the only reason it exists is because of new advances.

But it is important to note that the services that are frightening are the ones that have corporate backing because they are able to scale. Frankly, I am not so sure that Napster would be a very big thing if it wasn't for the fact that someone can afford to run the central servers.

But it is important to note that the legality of Napster is a much stickier question, and it is a question I happily leave up to the Ninth Circuit Court. I am not sure what the right answer is, but I can tell you one thing. I can tell you that the people on Napster are often making copies of music illegally. They are making music available that they do not have the right to distribute.

Now, the real problem is—and this brings me to my third point—market forces and the court system will solve this situation. There is no real need for a major look at copyright law. Copyright law as it exists today is actually pretty good. It says quite clearly in the Net Act that even distribution or copying of copyrighted material is illegal even if it is only for possibly monetary gain, not actual monetary gain.

The question is it is sort of a problem of a death by a thousand cuts. The issue is that the way the Net Act currently works, it takes a very large trigger and then it starts very, shall we say onerous enforcement proceedings, basically felonious copyright triggers. People lose the right to vote.

Well, the problem is that copyright piracy online is simply a lot like speeding. Basically, right now, a whole bunch of people are going down the freeway at 110 miles an hour and there isn't a single person out there to stop them. Setting up a situation where people like Lars Ulrich have to actually go after their own fans is

not a system that we who are granting government monopoly right there in the Constitution should be continuing.

What we should look at is new ways to enforce what is already illegal so that people realize that they actually do have some risk in doing something that is not currently legal in the United States. But, importantly, I think that has to happen with the making available of the music that people really want to have. It is very difficult from a moral position to say to someone, you can't distribute that, when there is no other option other than going to the store and paying \$16 for the CD and encoding it in the format you wish.

I frankly think that from an enforcement point of view, we have a much better moral position, even though the legal position is the same for all of us. We actually offer you the opportunity to buy that song for \$.99, and if you are willing to rip off us and the artists and the songwriters over a measly dollar, I am concerned about your moral fiber and your ability to respect the laws of the United States.

So with that said, and the fact that these are people running \$2,000 computers with \$40-a-month or \$50-a-month Internet access who just can't afford music, I am concerned that we need to look at how we enforce copyright law on the Net.

Thanks very much.

The CHAIRMAN. Thank you, Mr. Hoffman.

[The prepared statement of Mr. Hoffman follows:]

PREPARED STATEMENT OF GENE HOFFMAN, JR.

INTRODUCTION

It is a pleasure to take part in this hearing on the future of digital music and the market for downloading music over the Internet. I greatly appreciate the Judiciary Committee's leadership in creating this opportunity for artists, consumers, government and industry to focus together on how we can encourage our nation's continued technological and economic leadership toward further advancement of human expression of literary or scientific value.

My remarks today will focus on a top priority of the music and Internet technology industries: the role of knowledge and intangible assets in the New Economy. For the companies that make up the New Economy, nothing is more crucial to success than striking a balance between using technology and respecting the rights of others. Whether it is the balance between marketing and protecting an individual's privacy or freedom of speech and protecting children from harmful or illegal content, those companies that balance breaking new ground in the electronic frontier with enabling those with assets today to continue to benefit from their work will succeed. My vision for the future of the digital music industry is one that combines downloadable music with subscription services, with new forms of promotion and marketing that breaks the revenue ceiling from today's 40 billion to the often touted 100 billion mark. Simply, physical promotion and distribution has peaked in economic terms; there is so much music already produced but unavailable to the consumer due to inherent inefficiencies in the physical business model. These inefficiencies either keep content from the market (*e.g.*, back catalog) or drive consumers to pirate music or to not buy at all.

BACKGROUND ON EMUSIC.COM, INC.

Let me take a few moments to tell you about EMusic. Since it was founded in January 1998, EMusic has established itself at the forefront of how new music will be discovered, delivered and enjoyed in the next decade. In addition to having the Internet's largest catalog of downloadable MP3 music available for purchase, EMusic operates one of the Web's most popular families of music-oriented Web sites—including RollingStone.com, EMusic.com, DownBeatJazz.com, and IUMA. The company is based in Redwood City, California, with regional offices in Chicago, Los Angeles, New York and Nashville.

EMusic.com is the web's leading site for sampling and purchasing music in the MP3 format, which has become the standard in the digital distribution of music. Through direct relationships with leading artists and exclusive licensing agreements with over 650 independent record labels, EMusic.com offers music fans an expanding collection of more than 100,000 tracks for purchase—individual tracks for 99 cents each or entire downloadable albums for \$8.99. EMusic.com features top artists in all popular musical genres, such as Alternative (Bush, Kid Rock, They Might Be Giants, Frank Black), Punk (Blink-182, The Offspring, Pennywise), Jazz (Duke Ellington, Dizzy Gillespie, Louis Armstrong, Concord Records), Blues (John Lee Hooker, B.B. King, Buddy Guy), Hip Hop (Kool Keith, The Coup), Country (Willie Nelson, Merle Haggard, Patsy Cline), Rock (Phish, Goo Goo Dolls, David Crosby), World (Nusrat Fateh Ali Kahn, Lee “Scratch” Perry) and Vintage Pop (Liza Minnelli, Eartha Kitt, Judy Garland).

To give you an idea of how fast the downloadable music industry is growing, the company has now sold over 1 million songs in the popular MP3 format since its launch. This total includes single-track sales as well as tracks included as a part of albums and special collections. In addition, EMusic.com's catalog has grown to offer more than 100,000 high-quality MP3s for sale from over 650 independent labels.

EMusic is part of the New Economy, both culturally and technologically. At twenty-four years old, I am the youngest CEO in NASDAQ. I am one of those freaks of nature in the high tech world—but in a very good sense. I am very proud of the fact that I have taken ideas and created companies with my friends and with many new people that I have been fortunate to meet along my journey. EMusic is my third company. My first, PrivNet, I created while in college. I sold it to GP, Inc., and went to work for PGP. PGP was sold in 1997 to Network Associates. While at EMusic I have bought four companies. Creating companies, jobs, and economic wealth—all depend on sound accounting principles supported by well thought-out public policy. EMusic is a young company that has grown by acquisition. So far EMusic has done purchase transactions because we are not poolable. This is one aspect of the impact of accounting rules on the New Economy. I will come back to that point shortly.

It is important to understand that EMusic represents significant intangible assets. Many companies in the New Economy do not and will not have any physical assets. Their value is either between the ears of their employees or on the hard drives of their computers and networks.

THE FUTURE OF MUSIC

When pirated music is easy to find, so are the people who are making it available. In other words, those who publish their digital music collections through programs such as Napster and Gnutella are unwittingly bringing attention to their less-than-legal behavior—kind of like speeding down the highway at 110 miles per hour. Unfortunately, some people will lose their license to drive.

Nobody responds well to threats such as these, but like traffic laws and patrol cars, their existence is actually a very good thing. In fact, I believe that a perceived risk associated with illicitly trading music will end up benefiting not only artists and record companies, but also digital music fans themselves. Let me tell you how this will all work.

First off, let's be realistic: There is absolutely nothing illegal about encoding your CDs into MP3 for your own personal use and enjoyment. Even sending a selection of those same MP3s to some of your friends is not going to get you into any real trouble. Additionally, there are plenty of free, promotional MP3s being circulated by both amateur and well-known artists, and those tracks are perfectly OK to share. And sites such as ours (EMusic) even sell MP3s licensed from independent record labels. The controversy in today's digital music industry stems from making MP3s available to potentially millions of people through file-sharing programs such as Napster and Gnutella, without the permission of (or compensation to) the copyright holder.

Besides the legal and moral issues involved, one of the main problems with the recent Napster phenomenon is that most people who are using these types of tools have the misperception that their actions are electronically anonymous and, therefore, completely risk free. In truth, these users can be easily identified and exposed, as Metallica proved when it produced the names of 300,000 participants who the band says have been illegally making its music available. Consumers and music fans do not realize that they are actually exposing themselves to a worldwide lens through which their music listening habits can be seen by anyone on the Internet. And with a few clicks and searches it is likely that they can be personally identi-

fied. Napster and other file sharing systems force people into the public eye of the Internet; question is whether consumers fully understand this and appreciate the downside to their privacy and security.

Firms are sprouting up to help artists and other copyright holder find the pirated music. NetPD and Copyright Control Services are just two examples of this new breed of business. Using technology very similar to Napster's, their companies can easily identify as user's IP address, ISP, and email address. When faced with the prospect of losing their Internet access, how many people will risk making their music collections available to a bunch of strangers? The pool of easily accessible pirated music will begin to run dry.

So how could this possibly be a good thing for fans that want their music in digital format? Because once we move beyond the current "music should be free" stage-rife with lawsuits, threats, and panic—more musicians and record companies should be willing to make their music available online in digital formats, and to do so legitimately.

The Internet is a wonderful way for artists and fans to get better connected and to expand and experiment who how music is produced, experienced, and enjoyed. The whole reason that Napster is so popular is because fans have recognized that music in a downloadable format is much more convenient to collect than compact discs. It also removes a lot of the barriers that keep lesser known musicians and niche types of music from being heard by more people.

CONCLUSION

When so much of the value of the American economy is tied up in intangibles assets, how these assets are perceived is really the driver of value. If the market is being driven more by perception than by the principles and rules that artists, consumers, government, industry and professionals have set out, then effective governance no longer works and anarchy has taken over. This is not fair to individuals and is not reflective of our nation's democratic values. Intellectual property is an extremely important part of our nation's economy. I doubt that even Napster's investors and employees and consumers want anarchy at the end of the day. Their consumers want a reliable service and those with a vested interest in Napster wish to see a return on their investment.

Whether it is Hollywood in southern California or Silicon Valley in northern California, ideas and intellectual property are drivers of our nation's economic growth and international economic influence. While I am not in favor of any new governmental role here or in any new body charged with setting rules or standards for digital music distribution, we do need to work together in a new way to develop a better understanding of where music and other forms of digital intellectual property are going in this country and around the world. I look forward to the day in the not-so-distant future when we can focus on these positive effects and wonder what all the fuss was about.

The CHAIRMAN. Mr. Kan, we will turn to you.

STATEMENT OF GENE KAN, GNUTELLA DEVELOPER, AND FOUNDER, INFRASEARCH, INC., BELMONT, CA

Mr. KAN. Thank you for having me here. My name is Gene Kan. I am a Gnutella developer, one of many. I am not the inventor of Gnutella, but I am simply one of the people who happily talks about it. There are many people behind me on the Internet who work to make Gnutella succeed.

Gnutella is an interesting technology, one which, in fact, I have used as the foundation block for a company which I recently founded called InfraSearch. We took investment from people who founded Netscape and Excite, and they are all very interested about the technology. In fact, Silicon Valley is abuzz with the impact of fully distributed, decentralized technologies such as Gnutella and its applications outside of music download.

So let's get to the heart of the matter. This hearing is about the future of profiteering on the mass distribution and duplication of intellectual property. It is a do-or-die situation, but the future is unclear, so let's hear the good news first.

The good news is that the Internet is on our side in this; it is on everyone's side. The Internet is a huge distribution channel with infinite shelf space. Take, for example, the examples which I cited in my written testimony, which I would like entered into the record.

The CHAIRMAN. Without objection, we will put it in.

Mr. KAN. Thank you.

I have searched for 2 years for John Denver and Johnny Cash albums at local record outlets in the Bay Area of California. I have been unsuccessful. However, previous to this hearing, I tried. On Napster and Gnutella, I found several hundred copies of John Denver and Johnny Cash tracks—"Ghost Riders in the Sky," "Take Me Home Country Roads," both great songs, but I have been unable to listen to them through conventional outlets.

Really, the Internet is the Holy Grail of distribution channels. It is a zero marginal cost distribution channel. That means that it costs the same to transfer one copy of intellectual property as it costs to transmit 10,000 copies or 1 million copies or 10 million copies. This is truly the Holy Grail of distribution channels. There is no physical media, there is no marginal cost. We don't have to print CD's, we don't have to ship CD's. We don't have to mine the aluminum, make the CDs, destroy our environment. The list goes on and on. The benefits of digital downloadable media are infinite.

Twenty million Napster users can't be wrong. People like this stuff. People love to download music from the Internet. It is convenient. I can take my entire record collection with me on the plane. It is just an incredible experience. The rollout of broadband nationwide and worldwide makes this number swell; 20 million today, 100 million tomorrow. Everyone will want to download music.

Our goal is to try to establish a method by which artists, whom I call the intellectual property profiteers, can profit side by side with these people exercising their rights to listen to music in a convenient format. The question is how are we going to harness the Internet, how are we going to make the Internet work for us, us as consumers and us as intellectual property producers and owners.

The answer is simple. I refer to my friend, Tracy Scott, who developed this very simple model where we incentivize pirates, we turn pirates into legitimate distributors. The fact that we are here shows the efficacy of these pirates, and we can only assume that if we were able to appeal to the profit motive of pirates, they would be equally efficacious in profiteering.

So what am I talking about? Let's assume that I can buy a track for \$1.50 from, say, Sony or BMG. I can resell that track to you, Mr. Leahy, or Mr. Hatch, for \$1.00. Let's split 50-50. I make \$.50, the record company makes \$.50. Everybody is happy. I am out there trying to profiteer. The profits are staggering—20 million users today downloading what Lars Ulrich claimed as an average of four songs per night. The profits are simply staggering, and people will love to do this because we are appealing to the profit motive.

So what about the bad news? The bad news is that old-world tactics may no longer work on the Internet. This is the new economy.

That is a familiar term. Technological relief may be impossible to stem the tide. Encryption, locks, whatever, they are all useless. If we can hear it, we can pirate it. The only way to manage this is through incentive. We must incentivize people who are pirating and working against the system right now. We have to use the carrot and not the stick.

In fact, legislative relief is a questionable possibility here. People are infringing now and they might not change their habits simply because of the law. People speed all the time. We roll through stop signs, not a big deal. In fact, we just infringed right now and everybody sort of chuckled about it. So what does that say about the future?

And perhaps injunctive relief is questionable. With distributive systems of today such as Gnutella and Freenet, it is already nearly impossible to enjoin people who are acting in an infringing manner. The technologies of tomorrow will be even worse; they will be even more difficult to police.

Can we stem the tide of new technologies? Highly unlikely. So what does the future hold? Great things if profiteers adapt, if intellectual property profiteers adapt. There is room only for the leaders. The Internet is inhospitable to middle men and followers. Technology moves forward and leaves the stragglers behind. The adapters always win and the stalwarts always lose. Mechanized farming is a good example. You don't see anyone out there with a horse and plow these days.

The future is in the creative exploitation of new technologies. Maybe the express control over intellectual property distribution is out. That doesn't mean that intellectual property owners and profiteers are going to go hungry. The Internet touches everyone and everything. Everyone must adapt. Business and intellectual property owners are not excluded.

Thank you. I hope that we can reach a reasonable conclusion here and make everybody happy. Thank you for having me.

The CHAIRMAN. Thank you very much. That was a very intelligent statement, except I don't think we infringed when we downloaded because it was for educational and governmental purposes, so it is fair use. And since we define what that is, I will hold you in correction on that. [Laughter.]

[The prepared statement of Mr. Kan follows:]

PREPARED STATEMENT OF GENE KAN

1. INTRODUCTION

The future of intellectual property in the face of broadband is uncertain.

Intellectual property control on computer networks has long been a problem for the software industry.¹ Most recently, old-economy enterprises such as the Recording Industry Association of America (RIAA) have taken notice. Music is the topic of the day, so let's focus there.

Technologies enabling the simple and fast exchange of music have existed for decades. In the physical world, audio cassettes led the charge. Remember recording songs off the radio? Minidisc and recordable compact discs made it easy to swap and pirate music en masse with near-original quality. In the virtual world, swapping MIDI, tracker, and other formats of digitized audio were already commonplace when I began BBSing in 1994.

¹ Software and Information Industry Association (<http://www.siiia.net>), 9 July 2000. The SIIA claims a loss of 59.2 billion USD in the past five years with 12.2 billion USD lost in 1999 alone.

Other media have had similar histories. Movies, images, and text have had their equivalent of the audio cassette: that first easy-to-use duplication instrument. Video cassettes, video compact discs, photocopiers, scanner, email, optical character recognition. * * * The list goes on for some time, and has been going for some time now.

So what is it about the Internet that has made the long-lived problem of media duplication such a pressing issue? Recording industry executives claim that one main factor is ease of use. Anyone, particularly university students,² can easily download whatever music they want in minutes.

For typical home Internet users (56 kbps modem) it takes approximately eleven minutes to download a high-quality MP3-encoded song.³ For a typical university student it takes about thirty seconds. The recording industry would argue that the downloaded file, when played back using an MP3 player,⁴ is similar in sound quality to the original compact disc.

The cost to download? In the US, most Internet Service Providers (ISPs) charge a flat rate, as does the telephone company for local calls. That makes the incremental download cost approximately zero. It's mainly a matter of patience and hard disk capacity.

With the impending globalization of inexpensive broadband access, what is becoming a headache for the music industry will become a headache for the movie industry.

2. CONSUMER DEMAND

Downloadable music attracts all manners of people. Recording industry employees, doctors, lawyers, students, adolescents * * * the list goes on. The people who use Napster are not criminals. They are not the thugs you see on the evening news. The people who use Napster are your family and friends.

There are numerous theories on why MP3 is so popular, and I'll cover a few of them below. But the simple fact is that digital downloadable music is hugely popular. So popular, in fact, that the recording industry recently capitalized on Napster's success by using it to "leak" new songs by Madonna and Dr. Dre, among others. No, they'll probably never admit to it, but it did happen, and it's well known throughout the music industry that these songs were leaked from within the record companies to generate hype the same way movie trailers do.

Convenience

The convenience of MP3 is undeniable. For less than 1000 USD one can buy a 20 gigabyte hard disk, which stores approximately 5000 near-CD-quality songs. The hard disk fits in your shirt pocket, or neatly into your computer, where it will provide about 20000 minutes (fourteen days) of continuous listening. Portable MP3 players are about the size of audio cassettes. Compare that to compact discs which store about seventy-four minutes of audio and don't fit into standard pockets.

Finding music is typically a very tough process. These are the steps I take: Drive to the record store. Scour the shelves. Buy, if I'm lucky enough to have found something worth trying. Drive home. Listen. Remember the tracks that I like.

The steps for Internet music purchases are much more simple. Let's take a brief look at the buyer experience at Amazon.com. Click over to Amazon.com. Click "popular music". Type in "John Denver". Get a screenful of results. Click. Buy. Moreover, when I clicked on "John Denver's Greatest Hits", Amazon recommended several other albums I might be interested in. Record stores don't do that, and if they did, I'd have to scour the shelves again for the recommended disc.

Unfortunately, at this time, Amazon doesn't sell MP3s. Buyers must wait for the physical CD to be delivered. And MP3.com, which does sell MP3s, doesn't sell an MP3 version of "John Denver's Greatest Hits". So while the Internet makes a step in the right direction, there is currently no well-known non-infringing method of downloading "John Denver's Greatest Hits".

The ultimate, really, is found in information-sharing communities such as Napster and Gnutella.⁵ Users are able to search for exactly the information they want, and

²American universities are commonly blessed with extremely fast Internet connections. They are also populated by young, technologically savvy people with few financial means.

³Popularly encoded songs (128 kbps at 44 KHz) are approximately one megabyte per minute.

⁴MP3 players are numerous and varied. Software-based players include the popular Winamp (<http://www.winamp.com>). Hardware players include the Walkman-like Diamond Rio and the in-car empeg (<http://www.empeg.com>).

⁵Gnutella is a fully distributed network comprising individuals and computers which actually build the strength of the network as they join it. Without users, Gnutella is nothing but a defini-

download it instantly. As it relates to music, that means users can search for exactly the artist and song title they are interested in. Forget scouring the store shelves only to find that what you wanted is not in stock.⁶

It's my personal guess that if people could pay a reasonable price for the music they download, they would. At this time the only well-known pay-for-download services do not carry downloadable versions of popular albums. People have no choice. If they want the convenience of downloading, they unfortunately have no way to compensate the copyright holder.

Cost

The marginal cost of an MP3 is zero. Even for consumers. When the telephone company comes to your house to install your DSL, they might charge 150 USD for installation and 50 USD per month. Using that line, an infinite amount of music can be downloaded with little hassle.

Compare that to compact discs. Mine, transport raw materials, acquire raw materials, manufacture, box, transport, unbox, stock, inventory, sell, re-order, etc. All that costs a lot of money, and the Internet eliminates the whole cycle. On the Internet, it's: record the music, sell the music.

Flying

A popular argument for MP3 is that it makes music easily portable. Flying on airplanes imposes interesting space constraints. When I fly, I generally have a laptop computer with me so I can work while I'm in the air. Before MP3, I carried a portable compact disc player and a handful of the CDs I liked most. Now, I can carry MP3 versions of all of my CDs on my laptop's hard disk. The best part: a full hard disk weighs no more than an empty one, and I don't have to find a place to stow my fragile CD player and CDs.

Environmental considerations

Compact discs, unfortunately, are made of matter. Matter which must be mined, manufactured, and delivered. Each step in that process holds numerous environmental disasters, and in the end the thing consumers are really after is the music carried on the compact disc, not necessarily the compact disc and its associated packaging.

The Internet makes near-zero-marginal-impact music ownership possible. Downloading an MP3 does not require the manufacture and delivery of a compact disc, box, liner notes, etc. To summarize its sweetness: no environments were harmed in the download of this MP3.

Quality control

One thing consumers demand above all others is product quality. Currently, Internet bootlegs of music vary greatly in quality. Some are ripped⁷ from CDs which have scratches. Others are encoded at horribly low bitrates, diminishing the audio quality to unbearable levels. Yet others are encoded using low-quality encoding software, leading to diminished quality.

The RIAA and its constituent record companies have an opportunity to exploit their own brand name and quality control procedures to produce digital downloadable music with consistent high quality. Surely music downloaders would pay a small amount to ensure they aren't wasting their valuable download resources.

When you buy toothpaste, do you buy Colgate, or do you buy Brand X Tartar Control?

3. BENEFITS FOR THE RECORDING INDUSTRY

Artists and recording companies alike can benefit from digital music. The reasons are numerous. For artists, it is a chance to reach directly to their audience: a global

tion of how computers might communicate over a network to exchange information. Gnutella is developed by hundreds of individuals around the world. Numerous Gnutella-compatible softwares are released with complete source code, increasing its appeal to technologists.

⁶I have searched for two years for John Denver and Johnny Cash at San Francisco Bay Area music outlets (Tower Records, Wherehouse, Fry's etc.) and have been unsuccessful. I suppose my tastes are a bit unusual, but I heard their songs as a child, and wanted to hear them again. Strangely, even immediately after Denver's death, no record stores carried his music. No stores even had a slot for John Denver! On Gnutella, I found hundreds of Johnny Cash and John Denver tracks. Similarly on Napster. If nothing else, this demonstrates the power of the Internet to assist consumers.

⁷Ripping is the process of extracting the data from a compact disc into a manipulatable file. After a CD is ripped, it is typically compressed and encoded into a space-saving format such as MP3.

audience. They have the opportunity to capture nearly 100% of the gross sales of their product. For recording companies, there is an opportunity to reduce the marginal cost of distribution to nearly zero, and to expand the scope of distribution to the entire Internet.

Artists

Whether or not it actually happens, artists have complained for a long time that they don't get a fair deal in their record contracts.⁸ Even Metallica, a band rumoured to have struck an outstanding contract with their recording company, sees the pot of gold:

"Yes, of course, the scenario that the gentleman asked in the question is very, very possible, and we've been looking at that for a long time. An when we are done with our record contract, I would say that something in that direction is somewhere (sic) between a real possibility and a certainty."⁹

The Internet allows artists to reach their listeners directly. Listeners can provide feedback at the click of a mouse button. They can use the same mouse button to purchase music directly from the artist. In effect, the Internet combines the best of the patron and performance systems. The entire audience can function collectively as the artist's patron: each individual listener funding the particular aspects of the artist that he likes, each listener encouraging the type of performance he funds.

Finally, artists will return to a situation where they can net much of the gross.

Recording companies

The benefit for recording companies is very simple: near-zero marginal cost of distribution.

Typically, this would be a business's dream. Why it has apparently become a nightmare is the subject of rampant speculation.

Perhaps it is because recording companies want to protect their current model of operation. Lars Ulrich summarized the role of recording companies very simply:

"Because what really, essentially, is a record company? A record company is really essentially a bank, a bank that funds a bunch of money to make records, and videos and promotion, publicity appearances and so on, and they take that shot that one day the artist is going to be successful that they're going to first of all get all their money back, second of all make a profit."¹⁰

Recording companies are in fact exactly like venture capitalists. They fund, promote, and advise their portfolio artists. What they mainly do is everything necessary to distribute music in the physical world. They maintain relationships with radio stations, record stores, and they arrange for manufacture and shipment of CDs.

Of course, the Internet changes that last bit. If communities such as Napster and Gnutella are really successful, then perhaps the market for music on physical media will shrink. But is that a bad thing? Environmental considerations aside, a near-zero marginal cost distribution system should be a boon to the companies which own the copyrights to popular music. They would be able to sell the intellectual property and net the gross.

4. RETOOLING MEDIA DISTRIBUTION

Exploiting new technologies often requires retooling. Automobile manufacturers, computer chip manufacturers, the United States Postal Service. * * * All have had to continuously change their methods of doing business in order to remain competitive. In the efforts to retool have proven themselves time and again to be worthwhile. Costs of production and distribution decline, profits increase. The music industry is not exceptional. Nor is the motion picture industry.¹¹

⁸Courtney Love has recently made statements to this effect at the Digital Hollywood Conference. A summary can be found at <http://rollingstone.lyocs.com/news/newsarticle.asp?D=10847&Artist=23> (9 July 2000).

⁹Metallica drummer Lars Ulrich on Slashdot.org (<http://slashdot.org/interviews/00/05/26/1251220.shtml>), 26 May 2000.

¹⁰Metallica drummer Lars Ulrich on Slashdot.org (<http://slashdot.org/interviews/00/05/26/1251220.shtml>), 26 May 2000.

¹¹Historically, both the music and motion picture industries have faced challenges from recordable media. One example is the video cassette recorder, which found motion picture companies suing Sony over Betamax. Video cassettes have since proven to become a huge profit centre for the motion picture industry by way of sales and home video rentals. After all, what would moviemakers do with straight-to-video productions if there were no video cassettes? Perhaps some day we will have straight-to-Internet music.

The only thing missing is a method for the record companies to financially exploit the Internet for what it is: the best intellectual property distribution mechanism yet seen on Earth. So here is an idea; turn pirates into paying distributors.

Turning pirates into paying distributors

Napster and Gnutella are giant music distribution networks. Every file-sharer is in fact a voluntary distributor. These communities are like potlucks. Everyone brings what he or she wants to share, and perhaps partakes in what others brought. Right now it all happens for free, mainly because there is no infrastructure in place to do it for profit.

Installing that infrastructure is a small matter, and its effects are huge. Tracy Scott's method of turning pirates into paying distributors is elegantly simple, and its success is predicated on only two assumptions. First, Internet connections have finite capacity. That's not just an assumption; it's a rule. Second, people have a pecuniary motivation. Suppose I have a finite-capacity Internet connection and lots of music to share. Lots of people like to download the music I share. Now suppose I could charge each downloader in a way that made it easy for them to compensate me for the music I am sharing with them. I would, of course, also compensate the record company for the resale of their intellectual property.

Now, because I have a finite-capacity Internet connection I would seldom, if ever, allow someone to download from me for free when I could charge for the privilege. If I charged 1.50 USD for each track, and split the revenues evenly with the record companies, the record companies would make 0.75 USD for each download! They would never have to promote or distribute their products themselves again.

You and I would be doing our very best to promote and distribute their product for them, as we would have a profit motive. Multiply this over the thirteen million you and I's on Napster alone, and the profits for distributors and copyright holders are staggering.

Do or die

Technology has interesting effects. Those who realize how to integrate and exploit new technologies gain potentially huge advantages over their competitors. Those who do not will acquire an equal disadvantage with respect to their competitors.

Intellectual property profiteers are now at a crossroads. If they adapt quickly, as they have in the past, they can leverage the Internet to revolutionize their industries. If not, they may find grassroots efforts invading their bailiwicks.

It's happened before: phonographs led to the demise of the player-piano music industry. The forward movement of technology always leaves behind the stragglers.

5. TECHNOLOGY IS JUST TECHNOLOGY

Technology is neither good nor evil. Individuals choose how to employ technologies. Some choose for good, others for evil. Some use automobiles as a conveyance. Others use automobiles to rob banks and kill people. To boil it down into a popular refrain: guns don't kill people, people kill people.

To adapt the saying for the discussion at hand: Napster doesn't pirate music, people pirate music. In fact people have pirated music in large scale for decades. What's happening on the Internet is nothing new.

Napster and Gnutella are on the one hand user communities. These users are the ones who are possibly pirating music. On the other hand, Napster and particularly Gnutella are notable technologies which are changing the way we look at the Internet.

Certainly these technologies are not running rampant on computer networks seeking out the latest Eminem tracks and pirating them. Humans are doing that.

People routinely use other means to distribute music over the Internet as well. Email, FTP, Usenet, IRC, ICQ, etc. All are used to distribute music on the Internet.

6. INEVITABILITY

Keeping in mind that music is only a current-day analog for all types of intellectual property, we will spend a little time analysing how duplication of intellectual property is inevitable, and why it makes sense to use the carrot instead of the stick.

When my family got its first IBM PC/XT in the mid-1980's, the first thing on my mind was games. In those days copy protections on games were very creative. They involved placing magic bits of data at secret parts of the floppy disks on which the games were distributed. For some time it was impossible to pirate those games. That is, until more advanced disk copying software was developed. After that, there were secret codes and product registration keys. Even physical keys (dongles). All have been defeated, generally on the day of the software's release.

Copy protection doesn't work

Certain cable television channels are scrambled. You can either pay fairly high recurring fees to watch those channels, or you can purchase a relatively inexpensive descrambler to watch those channels. More recently, DSS satellite television signals are encoded. So savvy consumers reprogram the DSS card to circumvent the encoding.

Protection schemes seldom work. Encryption for Microsoft WMAa format files was broken almost immediately after its release. The process was incredibly simple. One would purchase the right to listen to the encrypted audio file. Play it back through special software which records the decrypted audio file, and mission accomplished.¹² You now have on your hard disk a permanently decrypted audio file.

SDMI

SDMI, or the Secure Digital Music Initiatives, is what many record companies are betting on to preserve their control over music distribution.

My suspicion is that people in significant numbers will choose to re-encode SDMI music into MP3 (or some other freely distributable format). In fact, if even a few people reencode and distribute a song, the fluidity of information-sharing communities will ensure its rapid and extensive duplication.

End-to-end encryption

One onerous tactic I have heard is postied end-to-end encryption. The idea is that at no point is the media unencrypted. The file is encrypted. The data travelling from your hard disk to your digital speakers or your digital monitor is encrypted. Currently even encrypted media formats are decrypted long before the data makes it out of your computer. In end-to-end encryption the data is encrypted right up until it is presented visually, audially, or otherwise.

It's an interesting idea that at first appears to put a stop to piracy. But in my mind there are few if any panaceas that are predicated on authoritarian control, and end-to-end encryption is not among them.

End-to-end encryption is easily defeated. Currently, movies are often copied using a method commonly termed "telesyncing."¹³ If end-to-end encryption became a reality, audio and video would surely be telesynced. The encryption would be rendered meaningless.

The end-to-end part of the end-to-end encryption idea is misleading. Since humans don't have decryption systems built into their anatomy, information must be deciphered before we experience it. And that is the failing. The only way to make music that cannot be copied is to make music that cannot be heard. The only way to make movies that cannot be copied is to make movies that cannot be viewed.

Napster and Gnutella are just the first wave

Napster and Gnutella are but the first of a succession of technologies which will make it increasingly difficult to control the distribution of intellectual property.

Napster was the first. It involved a central server, which has demonstrated that it can be a point at which controls can be applied.¹⁴ Gnutella was second. It involves no central server, eliminating the possibility of easily controlling the habits of Gnutella users by strictly legal means.¹⁵ Gnutella is only pseudo-anonymous. FreeNet corrects that. It, like Gnutella, is fully distributed with no central server, and it is completely anonymous.

If laws are enacted against these technologies, the ensuing replacements for these technologies would only be more difficult, if not entirely unfeasible, to police.¹⁶ This is only the beginning.

¹²This piece of software was interestingly called UNFUCK.EXE and has made its way around the Internet like a brushfire. Copies of it are largely found outside US borders, where the road to stamping it out is rife with jurisdictional hurdles.

¹³Telesyncing is crude, at best. The process is simple: a person enters a movie theatre with a video camera and tapes the movie. Later he digitises his tape and releases the results on the Internet. A large network of pirate movie FTP (File Transfer Protocol) sites propagate the digital media worldwide.

¹⁴Both Metallica and Dr. Dre have exploited Napster's centralization in their campaigns to thwart piracy on the service.

¹⁵The idea that the RIAA or its designates may "spam", or purposely overburden the network to cripple it, has crossed my email inbox numerous times. Fortunately for the legitimate users of Gnutella, spam and its relatives have been outlawed.

¹⁶Perhaps when Vice President Al Gore created the Internet he never thought it would come to this, but then. Senator Trent Lott probably didn't think of the myriad uses for paper clips either.

7. WHAT SHOULD WE DO?

A zero-marginal-cost means of distribution is a rare opportunity. It should be seized and exploited. Tracy Scott's viral marketing method is a clear and simple way to give incentive to Internet music shares to promote the legitimate sale of music. The current crop of technologies should be encouraged and adopted, not restricted or abolished, lest lawmakers and industry leaders wish to bring forth truly intransigent technologies.

We're on the precipice of slippery slope. The toothpaste is already out of the tube. It can be exploited nicely, or be turned into a huge mess.

The CHAIRMAN. Mr. Griffin, we will turn to you.

STATEMENT OF JAMES HAZEN GRIFFIN, FOUNDER AND CHIEF EXECUTIVE OFFICER, CHERRY LANE DIGITAL, LOS ANGELES, CA

Mr. GRIFFIN. Mr. Chairman and members of the committee, my name is Jim Griffin. I am the CEO of Cherry Lane Digital, part of the Cherry Lane Music Group, created by world-renowned musicologist Milton Okun. I serve as co-chairman of a start-up, along with Jeremiah Chechik, of a company called Evolab, an evolutionary laboratory where we focus on the wireless delivery of media.

I thank you and your staff, most especially Sean Bentley, for the opportunity to appear today and address these issues. I believe they are of paramount and universal importance, to name just two of the companies that will be affected by them. Your foresight in convening these hearings is to be commended. There is and always will be enormous change in the delivery of entertainment and all intellectual works, whether music, movies, books, or other forms of art.

Essentially, my remarks are a brief presentation centered around a half a dozen fundamental points, but they deal with the basic instinct that was expressed best by Nicholas Negroponte. Things that think like to link, and that will not change.

My first point is that no one is here to defend free music. But music can and should be made to feel free even when it is not free. Few will honestly suggest long term that music should be free, as this would be absurd from either a business or an emotional point of view. Indeed, if it were truly free, there wouldn't be much more of it, as any economist can tell you and as any artist will readily verify, and as some here today have.

However, as certain as I am that it must not be free, I suggest that it is our obligation and our opportunity to, insofar as possible, make it feel free, at least at the moment we decide to use it. The delivery of music is approaching zero marginal cost, the cost of enabling each listen after the first. And for some, this is a terrifying prospect, as their income may have depended upon charging a price much higher than marginal cost, say \$18 for a disc that costs no more than \$1.00 to reproduce.

For others, this is not at all terrifying. To Mel Karmizian, who runs CBS Radio and its Infinity broadcast stations, it is expected of him. He makes music played on CBS stations feel free to its listeners, though they pay indirectly each time they patronize an advertiser.

Today, it can be truly said that music behaves more like Thomas Jefferson's candles. He pointed out that when he lights one with another, it diminishes the flame of the first not at all, and that in-

formation and knowledge does not act like an object subject to the laws of supply and demand. Respectfully to Mr. Ulrich, music is not his table. There is no fair use applied to his table, nor does his right to own his table have an expiration date. Neither can his table change from a product to a service. Much like an attorney who writes a good will, once the word is out others will adopt it and there will be less compensation.

Another part of the disconnect is that music fans no longer feel like consumers. We use the word “consumer” liberally here, but there is no consumption today, as there is no less music after playing it than there was beforehand. The supply of boxes containing music is decremented not at all, and arguably the demand is increased. So this explains some of the disconnect.

My second major point, I think, addresses how we can deal with the disconnect. It is that in the music world, like so many others, service is replacing product. Quite simply, we are moving from a world of music as a product to a world where music is a service. Essentially, we are learning that the answers lie in new business models, not technology-based solutions.

The video industry that once emphasized control now sees greater value in growing the crowd. The best forms of copy protection are new business models that destroy the motive to copy, not its mechanism. A wireless, flat-fee, advertising-supported jukebox of unlimited capacity would strip us of our desire to make MP3 files. We are transitioning, as my friend John Perry Barlow likes to say, from an economy of nouns to one of verbs, an economy that emphasizes the wine and not the bottle.

It is time to set a price for the interactive license and administer it. The consumer wants option value without the disc. In an increasing mobile and wireless world, this is not an unreasonable request, certainly no more unreasonable than wanting to watch a local network television station via my DirecTV satellite dish, which you mercifully enabled over the objections of local network television stations which had copyrighted the content.

The third major point I will make is the digits will become ubiquitous and will increasingly arrive just in time and in a customized way. They will eventually cease to be distributed digitally through downloads or transferred in analog boxes. The arrival of wireless digital access will permit this just-in-time access. The commonly held belief that we are moving from a world of analog distribution to digital distribution, I think, is wrong. I think that the just-in-time delivery of content will obviate distribution entirely.

Fourth, I think history proves by analogy that these things are true. The transition that entertainment went through in the 1920's is an example, and we saw it more recently with the video cassette recorder. The sports industry, too, claimed that those who would broadcast or electronically transmit their events were attacking a product, the stadium seats. And yet Ronald Reagan was one of the very first pirates, if we apply this analogy, recreating games in a booth down the street, allowing others to listen to a sporting event that they would not otherwise be able to attend. And so in many ways, Ronald Reagan was the Michael Robertson of his day.

The fifth major point I will make is that there will be a renaissance of creative expression. Technology's deepest impact will be

from enabling the digital delivery of art, such as music, movies, books, other intellectual property. Respectfully, this is not about how we move the Metallicas or the Alanis Morrisettes or the Guns and Roses. This is about how we enable dead art to come back to life, new art to have a life it wouldn't otherwise have, and unusual art to find an audience that it would not have found.

And, finally, my sixth major point is that, in the alternative, the unfortunate possibility is that we could condemn billions of people to access to knowledge conditioned only on their ability to pay. Friction was a very useful tool in allocating access to art. Riding my bicycle to the library overcame the friction that others would pay to defeat.

If the delivery of intellectual property is to truly become friction-free, new models must evolve to restore and preserve balance. Digital lending institutions must evolve and flourish. The potential of every individual is at stake. Will their parents' wallet determine the music they hear, the books they read, the music and videos that they watch?

The digital delivery of intellectual property is our generation's nuclear power. We can either liberate knowledge through its friction-free delivery or we can develop these same tools to condition access to art, dependent only on our ability to pay. Knowing her love for libraries and hatred for restrictions on sharing art, I know how Eleanor Roosevelt would feel, and it is a sad fact that not many of us remember her contributions.

Thank you.

[The prepared statement of Mr. Griffin follows:]

PREPARED STATEMENT OF JAMES HAZEN GRIFFIN

My name is James Hazen Griffin. I am the Chief Executive Officer of Cherry Lane Digital, part of the Cherry Lane Music Group created by world-renowned musicologist Milton Okun. At Cherry Lane Digital we hope to absorb the uncertainty of our clients regarding the change inherent in entertainment technology. I serve as co-chairman along with Jeremiah Chechik of Evolab, the Evolutionary Laboratory, where we are focused on the wireless delivery of media. Before my involvement with these companies, I started in 1993 and ran for five years the technology department at Geffen Records.

I am also a founder and leader of the Pho group, approximately a thousand people connected electronically and through over a dozen meals held weekly around the world. The Pho group takes no position on these issues, but is instead a catalyst for discussion on issues such as those we are addressing here today. In addition, I write a column in every issue of the magazine *Business 2.0*.

Counsel accompanying me here today is Phil Corwin, a partner at the Washington, D.C., firm of Butera & Andrews. This appearance would be considerably less coherent without Mr. Corwin's guidance and that of the Senate Judiciary Committee's staff, and I thank all these people along with you for the opportunity to appear today and address these issues, which I believe to be of Paramount and Universal importance, to name just two of the studios that will be affected by them.

The Pho group and my advisors and associates have contributed mightily to my comments today, but they are not to blame for its presentation and my nervousness and perhaps resultant failure to fully articulate them.

Your foresight in convening these hearings is to be commended, as there is and always will be enormous change in the delivery of entertainment and all intellectual works, whether music, movies, books or other forms of art.

Essentially, my remarks are a brief presentation centered around a half-dozen fundamental points:

1. No one is here to defend free music, but music can and should be made to feel free, even when it is not free.

Few will suggest music should be free, as this would be absurd from either a business or emotional point of view. Indeed, if it were truly free, there wouldn't be much

more of it, as any economist can tell you, and any artist will readily verify. I am certain there are some here today who will.

However, as certainly as it must not be free, I suggest that it is our obligation and our opportunity to insofar as possible make it feel free, at least at the moment we decide to use it.

The delivery of music is approaching zero marginal cost—the cost of enabling each listen after the first. For some, this is a terrifying prospect, as their income may have depended upon charging a price much higher than marginal cost, say \$18 for a disc that costs no more than a dollar to reproduce.

For others, this is not at all terrifying. To Mel Karmizan, who runs CBS radio and its Infinity broadcast stations, it is expected. He makes music played on CBS stations feel free to its listeners, though they pay indirectly each time they patronize an advertiser. Likewise, Jerry Seinfeld feels free to his viewers, none of whom can remember paying, though they all do. If we suggested to either of these gentleman that they encrypt and protect from non-paying eyes and ears their words and images, they would laugh, as this would reduce the income they receive.

Indeed, for those who pay a subscription fee to watch MTV or listen to an audio service, though they pay directly, each decision to listen or watch returns more value for fees already paid, making the use of music or movies a positive economic act.

Today, it can be truly said that music behaves more like Thomas Jefferson's candle—which when lit with another candle diminishes the flame of the first candle not at all—than it does like an object subject to the laws of supply and demand.

To the music listener who shares music, there is no consumption, as there is no less music after playing it than there was beforehand. The supply of boxes containing music is decremented not at all, and arguably the demand is increased.

These are the new clothes the music industry must wear if it is to grow to the \$100 billion business it wishes from the \$40 billion business it is.

2. This is because in the music world, like so many others, service is replacing product.

The economy that affects the jobs of steelworkers and artists alike is changing in fundamental ways, and like so many industries, the artist's world is transitioning from product to service.

Essentially, we are learning that the answers lie in new business models, not technology-based solutions. The video industry that once emphasized control now sees greater value in growing the crowd.

The best forms of copy protection are new business models that destroy the motive to copy, not its mechanism. A wireless flat-fee/advertising-supported jukebox of unlimited capacity would strip us of our desire to make MP3 files. We are transitioning, as my friend John Perry Barlow likes to say, from an economy of nouns to one of verbs. An economy that emphasizes the wine, not the bottle.

Digitization and data networks liberate content from control over its quantity and destination, in much the same way that broadcast of radio and television remove control over the number and location of listeners or viewers. Control over quantity and destination are customary requisites for establishing pricing schedules that leverage maximum price over marginal cost.

If control is lost, price falls and hovers at or near marginal cost of delivery. For example, if DeBeers lost control over the distribution of diamonds, their price would drop dramatically. Absent DeBeers' control, the price of diamonds would obey the standard laws of supply and demand and command a lower price in the market.

Digital service relationships, on the other hand, can and do flourish in an environment where there is no control and the audience is left to grow virally. With the service provider serving as a gatekeeper to the growing audience, profit can follow. Service relationships, such as those established by radio or television stations, emphasize repeat visits and informal or formal "data mining" to extract full value from the business affiliation.

The Net of the future will continue to exhibit flat-fee/flat-free pull, where we choose to monetize our presence by tolerating advertisements or by paying a subscription fee to banish the ads and the loss of privacy. We've already seen online services such as America On-line adopt the flat-fee model, as have telephone companies such as Sprint and AT&T. Where these companies once billed us for our activities and their duration, we now enjoy a smorgasbord of communication for one price.

At its most rational, consumer behavior suggests they believe media should be priced at or near marginal cost of delivery, which is closer to zero than 99 cents. This is the price to which they have grown accustomed in radio, television, newspapers, magazines, and so on. Where media can be controlled, such as concert seats or difficult-to-replicate analog items, consumers are more likely to be compelled to

accept a wide disparity between price and marginal cost, but uncontrolled media generally move at or near marginal cost.

Even if we can control the destiny of songs, we give up control over quantity and commoditization, creating a singles business where none has ever proved profitable. Even singles at a dollar apiece reduce album-related income because debundled consumers will skim the cream off a market built on bundled pricing. For years we've promoted singles and sold albums.

At its most irrational, by the way, consumer behavior suggests the obvious: We are often doing business with teenagers! This should be little surprise because it is teenagers we target with the music. It's as if we were complaining that they should like our dinosaur books more than those silly Pokemon cards—value is in the eye of the beholder, and the beholder is distracted and empowered in ways our experience cannot appreciate.

Regardless, we must realize that our digits will flow like water from their source to their destination. Whether disintermediated from broadcast or networks or disk duplication or kids plugging into listening posts or whatever, our reality is that our inability to control has a dramatic effect on pricing and our business plans.

Great music was made long before music the product was even conceived. Music the product is a relatively modern invention, and has been part of music for only a blip in history.

Promoting ubiquitous music as a service creates the right business model—with the permission of the appropriate rights holders (which may or may not include the artist, and may or may not include the music listener). When we move away from the package we liberate the content to seek larger audiences, and serving as gatekeeper to that ever-growing crowd is the key to viral success.

Even product-based business will thrive from entertainment the service. By creating a flat-fee buffet instead of the current tax on trying new things (\$15 to see if you might like more than one song from that new band), we'll likely see merchandise and concert tickets and all manner of ancillary income increase. At the same time, we can grow the bundled subscription revenues to support the financial licensing needs of the industry.

It's time to set a price for the interactive license and administer it. The consumer wants option value without the disk, and in an increasingly mobile and wireless world this is not an unreasonable request, certainly no more unreasonable than wanting to watch a local network television station via my DirecTV satellite dish (which Congress mercifully recently enabled over the objections of the local network television station, which copyrights the content).

3. Digits will become ubiquitous and will increasingly arrive just-in-time, and in a customized way. They will eventually cease to be distributed digitally through downloads or transferred in analog boxes.

The arrival of wireless digital access will someday permit just-in-time, customized access to music, movies, books and other media content. These digits and the content they carry will be streams, not downloads.

The capital markets enthusiastically support the growth of connectivity by whatever means, including wireless, copper cable, and fiber optic. Connectivity becomes an assumption, not a complicated arrangement. Our American obsession with wires and set-top boxes ignores belies the fact that China and Africa and others are not wiring, they're skipping head, leap-frogging to wireless, ubiquitous connectivity.

It's a commonly held assumption that digital distribution will replace the analog distribution system that traditionally delivers services and information-based products. In the music industry, for example, there is much talk about the future of downloading music singles for a dollar apiece—or free—in MP3 or some other digital format.

More likely, however, the notion of offering music or other data, such as Websites or movies or newspapers, to be downloaded and stored will give way to business models that emphasize the widespread availability of content. When we can access all the bits we want, wherever we are, whenever we want them, we won't want to carry them around. Delivery on a disk or fixed storage of any kind will atrophy, as consumers tire of digital-asset management lessons and content providers become annoyed at giving those lessons.

Products we once could only conceive of as tangible are now fully functional services without form, ubiquitously delivered just-in-time at marginal cost and customized for each use and user. Put more simply, the ability to decide what I want and get it where and when I want it.

Economists call it option value. What it means to you is that this content is available at your option. Conversely, the song you hear on the radio or video you see on MTV isn't at your option, and is priced accordingly. We pay a price for the ability to have option value over something. A movie or song broadcast ephemeral has

low economic cost to the viewer, but on a prerecorded cassette it draws a premium for its option value. The entertainment business refers to it as the difference between a performance license (inexpensive, compulsory, generally embodied in a radio or television broadcast) and a mechanical license (relatively expensive, discretionary, and generally a box containing a disc or tape).

Today, however, consumers have access to a multiplicity of recording devices, some real products we plug into the wall (such as the Replay or TiVO devices or standard audio or video recorders), others are software services downloaded or accessed over the Web. They are buffers, repositories of digits that hold them for your later use, cached to enable you to summon them at will.

These products and services offer consumers option value over streams, the ability to retain an ephemeral performance and use it when and where they want to do so.

In other words, these buffers transform push into pull. They take content pushed aimlessly by broadcasters and make it content you pull when you want it, and if you don't want the commercials, you click a button and they disappear. They buffer or cache the output of the broadcast and allow consumers the ability to retain the content and use it virtually at will.

Ultimately, the only purpose of the buffers and caches we rely upon today, such as diskettes and compact discs and DVDs, is to overcome real or perceived supply inefficiency.

Buffers and storage are determinative factors of our media interaction today, but long-term they are obsolete, the equivalent of today's floppy disk—or disk of any kind. Disks are like traveler's checks in an era of automatic teller machines. Who amongst us didn't rely upon traveler's checks when we absolutely, positively had to have the money we needed to feed and shelter ourselves in a foreign land? Today, with the just-in-time efficiency of customized cash available with the swipe of a plastic card, I know few who bother.

In the final analysis, products, hard drives, and downloads disconnect, depriving the audience—and the creator—of a relationship bonded with continuous access. Every streamed use, however, is an opportunity to grow a closer, better relationship between artist and fan.

4. History proves this analysis by analogy.

A. 1920's

Radio was the first Napster, just as Gutenberg made simple the task of printing previously difficult papal indulgences. Radio meant that we could no longer control the quantity or destiny of the music, or sporting event, or church service, once broadcast.

The New Economy is anything but new. Like a recently purchased vehicle, it's new to us. But let there be no illusion: this economy has been around the block a few times. Sadly, we put out to pasture decades ago those who could teach us now. There are few old-timers remaining to bear witness to the truth: The Roaring '20s make our 2,000 days in the throes of dot-com fever look tame by comparison.

Acoustic became electric during the '20s with far more savage impact on the economy of art than we see now with electric becoming digital.

Radio was followed almost immediately by television. In 1925 the image of a revolving windmill was broadcast, and by 1928 the first patent was filed for color television.

Music and movies and books not only survived the 1920's, they thrived because of them, not in spite of them. Where radio was once viewed as a threat to the music business, it is now viewed as a necessity to success, and television and then cable television and the video cassette recorder have proven no different.

We recognized this and acted accordingly: There is a blanket, compulsory license applicable where control is difficult or impossible (i.e., broadcast, performance, satellite, etc.), and for the same reasons I am suggesting here it should be applied to electric becoming digital. These systems produce a known cost and easy licensing. Blanket, compulsory licenses imposed by Congress were the outcome of the recent DirecTV/DBS/DSS debate over rebroadcasting the copyrighted material of network broadcast stations, and in my opinion they will and should be applied to interactive use.

At some point, there will be so many digital licensees and so many digital licenses and so many digital licensors that we will likely agree to lower the overhead of negotiations and establishing a simple rate and an easy way to pay. The Digital Millennium Copyright Act itself offers a similar analogy in our world, because it promises (but has not yet delivered) one simple rate with automatic licensing.

Ironically, today we live in a world of blanket, compulsory enforcement (there is one organization per industry enforcing the laws on behalf of every company in roughly the same way) instead of blanket, compulsory licensing.

B. Video cassette recorder

The entertainment industry must learn from its mistakes. In the 1970's, Universal City Studios fought the introduction of the videocassette recorder. Universal felt that losing control of the quantity and destiny of content would lead to ruinous damages for information purveyors, and took Sony to court as the primary manufacturer. The case went all the way to the United States Supreme Court, but fortunately Sony won. Today, Sony shares with Universal the rich revenue stream provided by videocassette distribution, and most television companies participated in the VCR+ system that makes videotaping easier.

Print purveyors took a similar view in the early days of the Web. Many that previously feared copying today offer a one-click button to "send this story to a friend."

C. Sports

Sports team owners were once certain that televising sporting events would be the death of their sport—why go to the game if you can watch it on television, our business is selling stadium seats—who now could not and would not survive without it.

It is legend that Ronald Reagan was one of the very first sports broadcast pirates, recreating games in a booth after reading them over a wire service. Ultimately we've come to realize that not only was there no threat to Reagan's game broadcasts, but they actually grew the size of the crowd, and served an important purchase that we once confused with theft. Little wonder we now encourage broadcasts from the ballpark.

D. Biology

Whenever I wade deep into law and technology, I find an analogy helps shed light on the otherwise incomprehensible. Biology fuses the wondrous with the incalculable, and it is instructive where methodology fails. Our rising level of digitization is like the Mississippi River during a flood, with whole towns and small cities disintermediated by water seeking the shortest path from source to destination.

Every day I find evidence of this flood, but technological or legal sandbags will not stop the deluge. As they say, the water eventually finds its way to the sewer and floods your home anyway. Technology has no switch, no lever to throw, no way to reverse the course that history and fate have chosen for intellectual property. Napster, Gnutella, and their progeny are the first flood waves to crest the berm. These peer-to-peer file-sharing systems were born to swap music, but are already finding use for movies, photographs, and other rich media content.

Intelligent storage is also part of this flood. The video business has its TiVo, Replay, and other devices that buffer push-based content and make it feel interactive to the viewer, allowing pull at push prices (flat-fee or flat-free), and without the commercials if you prefer. Audio versions of TiVo and Replay will likely arrive soon, permitting users to fill jukeboxes from digital and analog broadcast stations.

Technology does not have a switch, there is not a way to decide to go back. We can pass laws and we can hire lawyers to enforce them and they can employ technologists to enable their legal vision, but ultimately control of art is shifting from push (instigated by the artists and their enabling companies) to pull (at the will and at the instigation of art lovers).

5. There will be a renaissance of creative expression.

Technology's deepest impact will be from enabling the digital delivery of art, such as music, movies, books, and other intellectual property. The effects will go deeper than just changing the way we listen to popular music. Currently, we kill art regularly due to our need to balance the costs of distribution with its rewards. Once delivery is digitized, art need never die, and new art can come to life that might not otherwise find an audience.

The enabling effects of digitization will not be found in today's or yesterday's stars or big names. After all, they achieved worldwide delivery and distribution.

The primary effects of digitization are three:

A. Dead art will come back to life, and in the future art need never die

Today, it is necessary that we kill most art to ensure that some can live. Like a gardener who prunes a rose bush, we kill some art to enable others.

Entertainment studios routinely discontinue music products. They must determine where the cost of distribution exceeds the rewards, and act to keep the rewards greater than the costs.

Once digitized with the costs of delivery commoditized to a marginal cost near zero, no art will be said to have delivery costs in excess of its rewards, and it is

likely we will not only bring dead art out of the vaults and back to life, but we will find that art will never die in a digital future.

B. New art

Likewise, we abort new art even more often than we kill it. Everytime we turn away a new artist, what we mean to say is that we've decided that the costs of distributing their art will exceed the rewards.

We are essentially a college admission committee, denying an opportunity to dozens for the same of the few we admit.

Once commoditized with a minimal delivery cost, digital art can find a life it might never have otherwise found. We can enable new artists to find their audience where once distribution costs prohibited many such bold and noble experiments.

C. Unusual art

The rock band Nirvana, for example, might like to release every concert the band ever performed, but in an analog world of distribution this is impractical.

Now these bands can make available their entire repertoire of music, and so we will likely see in the future that we are able to purchase any Rolling Stones concern ever performed, or watch any baseball game played and kept in an archive.

6. In the alternative, this could condemn billions of people to access to knowledge conditioned only on their ability to pay.

Friction was a very useful tool in allocating access to art. Riding my bicycle to the library overcame the friction that others would pay to defeat. If the delivery of intellectual property is to become truly friction-free, new models must evolve to restore and preserve balance in access to art.

Digital "lending institutions" must evolve and flourish, spreading entertainment and information, replacing product with service. We must promise our children that like us they deserve to hear any song, read any book, watch any movie—regardless of their ability to pay.

The potential of every individual is at stake. Will their parents' wallet determine the music they hear, the books they read, the movies and video they watch?

Ultimately, digital delivery may prove as problematic as it is enabling. Once digitized, art can be liberated, but equally if not more tempting is the idea of making access conditional through encryption. If we choose the course of predicating access to intellectual property on ability to pay, a class-based society of information haves and have-nots will emerge.

Sadly, those with access will find the content pool diminished unless we open access to all, through digital libraries and ad-based services that make a mockery of content as product.

Once replicated, books—and by extension—movies, and music are available to everyone. As a child, I became addicted to books and music that librarians and others were happy to supply, regardless of my ability to pay.

I was encouraged to borrow any book or record in existence with the promise that if it was unavailable locally, other libraries would lend it to my library. I was promised access to any intellectual property I might seek.

Librarians schooled me in what could now be called the instruments of piracy. The library was the first place I saw a photocopy machine and a tape recorder. Use of these copying tools was openly encouraged and taught by those who also made change for the nickels needed to feed the copy machine.

No one called us pirates. None dared—though our actions violated any corporate interpretation of copyright laws, we were considered the opposite of scofflaws. We were scholars.

The fine balance between scholarship and piracy eludes us today in our relentless struggle to monetize the digital delivery of art and other intellectual property. Devoid of contextual motive, we now declare illegal and immoral any use of digits outside their predefined, technically based rule set.

Quite the opposite of the situation in my youth, it can now be said that some digits (and the knowledge they embody) are off-limits, and those limits are based purely on my ability to pay.

The digital delivery of intellectual property is our generation's nuclear power. We can either liberate knowledge through its friction-free delivery, or we can develop these same tools to condition access to art on ability to pay.

The CHAIRMAN. Thank you very much. You do remind me a little bit of Ronald Reagan. You are probably never going to survive this hearing. [Laughter.]

Senator LEAHY. Everybody reminds you of Ronald Reagan, Mr. Chairman.

The CHAIRMAN. Oh, no, you don't, I will tell you. [Laughter.]

Mr. GRIFFIN. They both loved Ireland.

The CHAIRMAN. You are just fine.

I am going to ask Hilary Rosen, the head of the Recording Industry Association of America, to maybe come up to the table, as well, so she can answer questions if anybody has them.

If you could sit by Mr. Ehrlich, that would be a good thing. We are glad to have you here. We are happy to have all of you here. This has been a very stimulating hearing to me, and each of you has a major role to play in these areas.

Mr. Ulrich, you have said that Metallica is not anti-technology and will embrace new formats to make your music available. Do you have plans to make your music available in a downloadable fashion?

Mr. ULRICH. Well, you have to remember that we are the artists, so I don't feel that it is my responsibility to spend my time seeking out those new technological avenues to do that. Our main concern is really when you have companies like Napster selling it for free. You know, it is sort of the analogy of if me and Mr. Barry were standing on a street corner together and I am holding a Metallica CD and I am selling it for a price and Mr. Barry is giving it away for free, which line are you going to stand in? So we don't feel that it is our responsibility to come up with the solutions. What we want to protect is the artist's choice.

The CHAIRMAN. I don't either. I just wanted to know if you were doing any downloadable—

Mr. ULRICH. Well, as soon as we stop spending all our time trying to defend and deal with this whole issue where it is at right now, we feel we look forward to moving on to the solutions at some point in the future. But right now, most of my energy is taken up just dealing with the situation at hand.

The CHAIRMAN. Let me ask you, Mr. Ulrich, again, and Mr. Ehrlich, what is your response to those who argue that if you put out of business companies like MP3.com and Napster through litigation, or businesses like Emusic by failing to grant them licenses for your music, you will greatly empower the Gnutellas and Freenets that do not have a business office to call when an unauthorized version of, say, "I Disappear" suddenly appears?

Do you want to start Mr. Ehrlich?

Mr. EHRLICH. We are in the business of making sure that our music is available to as many places as possible, and so it is not our intention at all to stop businesses from succeeding. But we do want to make sure that businesses don't unjustly enrich themselves without getting authorization.

The CHAIRMAN. But you do license to Mr. Hoffman's firm, Emusic?

Mr. EHRLICH. To date, we have not. We are in active conversations with a tremendous amount of companies and we have licensed through others.

The CHAIRMAN. Do you license Mr. Robertson?

Mr. EHRLICH. We are in active conversation with MP3.com.

The CHAIRMAN. Mr. Ulrich, do you care to respond?

Mr. ULRICH. Well, I mean we are looking forward to dialogue with all the gentlemen up here at the table at some point. Mr.

Barry has reached out to us a few weeks ago. There was a little bit of dialogue, not much that was close to anything that we felt comfortable with.

But we certainly understand, like I said in my statement, that this is the future. We have no problem with the Internet. It is just on whose conditions. We believe that, as the artists, we have the right to control what happens to our music, and that choice has clearly been taken away from us and we are opposed to that.

The CHAIRMAN. Now, Mr. Robertson, you have drawn an analogy between people making recordings of their own CD's for use in other devices and your Beam-It virtual locker service. Now, please explain the fair use purposes involved in a person making a single non-commercial copy for personal use and a business copying 45,000 CD's and selling access to them.

Mr. ROBERTSON. I think to describe a little bit about our Beam-It technology, the question really is when a person buys a CD, what are they buying? I would contend that they are buying a license to listen to that music on any format, on any device. And perhaps there needs to be some clarity in copyright law so that every time a new device comes out, like a cassette player, like a CD, like a VCR, we don't go through the same issue of does a consumer have a right to listen to the music which they have legally purchased on a new device.

With our particular Beam-It technology, we had to overcome some technology hurdles for the consumer. An average CD has about 600 megabytes of data. That would take hours and hours, if not days, on slow modem connections like the one we have here for a customer to load it into their personal locker.

The CHAIRMAN. Rub it in. I will tell you, both Pat and I were moaning and groaning about that as we went to the vote.

Mr. ROBERTSON. And so, yes, we did buy 45,000 CD's or so. We went out and purchased those through traditional retail channels, and they sit there unused. The only time they are ever activated is when a consumer verifies that they indeed do have the physical CD. That is an important thing to note here, is that we are rewarding paying customers. If they have a physical CD, they are allowed to listen to that tune. That is the real challenge here. If you reward customers that do pay for the music, you by definition encourage them to pay for the music instead of going to Napster and other resources.

The CHAIRMAN. Mr. Ehrlich, do you care to respond to that?

Mr. EHRLICH. Well, I am not a copyright attorney, and I feel that the courts evaluated the particular occurrence and they determined that illegal copying took place on MP3.com.

The CHAIRMAN. Go ahead.

STATEMENT OF HILARY ROSEN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, RECORDING INDUSTRY ASSOCIATION OF AMERICA, WASHINGTON, DC

Ms. ROSEN. Thanks, Mr. Chairman. I think it should be pretty clear, given the fact that these litigations have gotten a lot of attention, that in the case of MP3.com, they never sought licenses before they started this service. And in the case of Napster, they never sought licenses before they started this service.

The court did say that MP3.com is liable to seek licenses, and they have been doing that. And there might be some edgy disputes with Mr. Robertson and the companies about how those negotiations are going, but you might expect a negotiation to be a little difficult once there has been a court verdict such as the one that we had.

So I think it is important to know that these are business negotiations and that the artists and record companies didn't have a choice at the outset of the businesses to grant licenses because they weren't sought. In the case of MP3.com—and I really distinguish that business from what Napster is doing—MP3.com has a burgeoning new artist development section. They ask artists' permission before they put music through their site. This committee should not put these two companies' current business models in the same category.

The CHAIRMAN. Did you care to comment, Mr. Robertson?

Mr. ROBERTSON. If I could add one thing, yes, we are respectful of the judge's decision that we do need a license. The problem that we have is that we are faced with punitive damages that go into tobacco-esque numbers for a service that we were running for 4 months that they can show no damages, that they didn't lose any CD sales. In fact, we presented evidence that they sold more CD's through this process.

So for a service that was up for 4 months that allowed consumers to listen to their own music, my company is threatened with its very existence, not from one company, but from five major record labels, as well as from institutions representing multiple publisher entities. And that is the issue here, is having monstrous punitive damages over these arguably legal gray areas. I think everyone agrees they are gray areas.

The CHAIRMAN. Well, I want to be careful to stay away from the litigation if I can. I know it is tough to do, but I want to do that.

Now, Mr. Ehrlich or Ms. Rosen, either one of you, I would like to ask you a few questions about fair use. Are you ready?

If I purchase a CD to play at home, it is fair use for me to copy that CD onto a cassette to play in my car. Is that right?

Ms. ROSEN. Keep going.

The CHAIRMAN. The answer is yes.

Ms. ROSEN. You know, the copyright law is a strict liability statute. It was written, you know, by this committee. I think the issue that we are running into now and the issue that is unclear for these businesses is not what consumers have the right to do.

The CHAIRMAN. Right.

Ms. ROSEN. So we shouldn't be lost that that is the issue.

The CHAIRMAN. Well, I am going down the steps. Now, is it fair use if I give a copy to my wife to listen to in her car? I have made a cassette copy for my car and now I want to make one for my wife.

Ms. ROSEN. Mr. Chairman, you are leading me down the Napster argument before the Ninth Circuit Court. I can't go there.

The CHAIRMAN. Well, is it fair use for me to rip a CD onto my hard drive to listen to in my office? Now, if so, if it is fair use, then I assume it is similarly fair use for me to store that file on a server rather than on my hard drive. Yes?

If the server host decides for efficiency reasons that one copy of “Enter Sandman” is sufficient. [Laughter.]

You and I are going to get along well.

Mr. ULRICH. It is never sufficient. [Laughter.]

The Chairman [continuing]. Is sufficient to serve its storage clients rather than 200 identical copies, is that fair use?

Ms. ROSEN. None of the things you are saying are fair use. The issue, though, is one of enforceability, and what has happened is now the argument before the court that Napster is making about them taking the individual’s fair use right is proving that old adage that no good deed goes unpunished.

The fact that Metallica allows their fans a souvenir—or the Grateful Dead did—allows their fans a souvenir from their shows to make a copy and take it home, and maybe even share it with a friend, does not justify the idea that a commercial operation can enrich themselves with billions of dollars exploiting that tolerance. And that has been what it is; it is a tolerance for individual consumers to use their music as they see fit. And those two things are very different.

The CHAIRMAN. My time is just about up, but let me ask Mr. Barry and Mr. Kan a question. Can Napster or Gnutella peer-to-peer architecture be made to work with either accounting software that allows for accurate accounting for copyright royalties or access control software to ensure payment for using the music? And if it can, explain how. We will start with you, Mr. Barry, and then we will go to Mr. Kan.

Mr. BARRY. Mr. Chairman, I would just like to make sure that we understand that Napster is not Gnutella, and I do not share the views that Mr. Kan expressed in his testimony with respect to the future. The world of music lovers that I have experienced in the last 7 weeks as interim CEO is very different from the vision that he painted. I have great faith in the American people and the degree to which we take pride in law abiding.

So technology does not mean the end of intellectual property. I think that is your question. Can we work out regimes where intellectual property is respected? The answer is yes, and I think Napster is doing that. I think what 20 million people are doing on Napster is sharing music. They are doing that for previewing purposes, they are doing that for sampling purposes, and then they are going out and buying CD’s. CD sales are up 8 percent, over \$1 billion, Senator, and the reason they are is that more people are interested in music. So we are generating interest in music. Now, do we want to work out a private arrangement whereby something could be done along the lines you describe? The answer is yes.

The CHAIRMAN. Can you do it, though?

Mr. BARRY. Technologically?

The CHAIRMAN. Technologically.

Mr. BARRY. I think that it would be extraordinarily difficult, but probably worth the effort.

The CHAIRMAN. Mr. Kan, we will let you finish and then I will turn—well, before I go to you, Mr. Kan, let me just say this.

Mr. BARRY, some of your arguments against Napster’s copyright liability are predicated on the assertion that Napster users are op-

erating within the bounds of fair use, as you have stated here today.

Mr. BARRY. Yes, sir.

The CHAIRMAN. Now, let me understand what you understand as the contours of fair use to be. If I buy a CD and I make a copy for the car or one for Senator Leahy, my friend, that is probably fair use. It may not be, in Ms. Rosen's eyes.

Mr. BARRY. Well, indeed, Senator, Hilary Rosen has said, "it's cool to make tapes, it's cool to trade them with your friends, it's cool to share music."

The CHAIRMAN. OK, but how about if I make a copy—she is so outgoing, I will tell you, it is just wonderful.

How about if I make a copy—

Ms. ROSEN. If that is the strongest argument you have, I am not worried.

The CHAIRMAN. How about if I make a copy for anyone who comes to my office? Is that fair use?

Mr. BARRY. For anyone that comes to your office?

The CHAIRMAN. Yes.

Mr. BARRY. For non-commercial purposes? I think the Audio Home Recording Act says yes.

The CHAIRMAN. If I post a copy on my Web site and invite people to download it, is that fair use?

Mr. BARRY. If you post it on your Web site and you invite people to download it for non-commercial purposes, I would say yes.

Mr. ULRICH. Mr. Chairman.

The CHAIRMAN. I will be right with you.

How about if I generate revenue through ads or access fees by attracting people to my site by offering a free download of that CD?

Mr. BARRY. Senator, just let me make one quick point and I will answer your question. You need to understand that the architecture which is described up here of Napster is sort of semi-correct, and the reason it is a little bit incorrect is that Napster does not host any files. There is no big Napster server where there are files.

Napster is an index, and that index is generated by the individuals who participate in the Napster community. So what you have are about 20 million people who have decided to agree to share some files among each other. It is all person-to-person. They do it for no money on a one-to-one basis. We believe that is—

The CHAIRMAN. You are saying that yours comes close to being Gnutella.

Mr. BARRY. No, sir. What I am saying is that we provide the index, we provide the community.

The CHAIRMAN. They can all plug into that index, which would be the server.

Mr. BARRY. Well, it doesn't serve them, sir. The actual transfer is done on a one-to-one basis from one computer to another. We play no part in that. In fact, the court ruled that we play no part in that. So to get to the answer to your question, the point is that it is a community where that one-to-one sharing goes on.

The CHAIRMAN. OK. Did you want to say something, Mr. Ulrich?

Mr. ULRICH. I just have to comment. The use of the word "sharing," I think, is wrong in this discussion. The word "sharing" has such a positive, community type of friendliness attached to it. And

I really think that you have to replace the word “sharing” with “duplicating.” If I share a sandwich with you, I am left with half a sandwich. If I share my car with you, I lose the use of my car one day.

But what is really going on here is that we are duplicating; they are using the word “sharing” instead of “duplicating.” My music is the currency in this situation, and my music provides somebody else with getting access to another song. So, really, you know, my music is the currency here, and this sort of free-spirited thing, everybody sharing it, and so on, we feel that that is really not just the right terminology to use in this situation.

The CHAIRMAN. Mr. Kan.

Mr. KAN. Could you reiterate your question, please?

The CHAIRMAN. Yes. Basically, what I was saying is can Napster and Gnutella really—in your peer-to-peer architecture, can you make either or both of them work with accounting technology or software that allows for accurate accounting for copyright royalties, or access control software to ensure payment for using the music? And if you can, then tell us how.

Mr. KAN. Well, I think that it would be extremely difficult. Even if we were to force that upon software developers in this country, we throw in a couple of national boundaries, cross a few jurisdictions and that sort of control evaporates. There are going to be open-source efforts, such as Gnutella, wherein developers are not forced to conform to a particular set of constraints.

And if we were to constrain developers of Napster to say that they needed to do accounting, and so on, then there would be massive leakage. Everyone would just run to Gnutella or the successor technologies which would be even more onerous than Gnutella.

I think that the solution really is to apply the carrot, not the stick. We need to make people sort of want to allow profiteering on the mass duplication and distribution of intellectual property. In fact, today we haven’t really talked about the real sort of philosophical question of who should own intellectual property or anything like that. We have talked more about really the mechanics of profiteering on intellectual property in the digital age.

So I would like to really just kind of close my answer with a quotation from Mr. Lars Ulrich, dated May 26, on Slashdot.org, which is a popular Internet geek site. Mr. Ulrich says, “yes, of course, the scenario that the gentleman asked in the question is very, very possible, and we’ve been looking at that for a long time. And when we are done with our record contract, I would say that something in that direction is somewhere between a real possibility and a certainty.” He is talking about using the Internet as a distribution mechanism for his music, and he makes that commitment in spite of the lack of accounting controls and access controls on digital music.

The CHAIRMAN. But I guess what I am asking is do you believe that the Gnutella technology could be used by businesses which want to implement accounting or access controls.

Mr. KAN. Yes, it could, but I think that really the term “control” is something which the Internet has sort of despised for the 30 years of its existence. Really, the Internet—

The CHAIRMAN. But you think you can?

Mr. KAN. Yes. I think that people can be incentivized into putting that kind of thing into their software, yes. We must appeal to their profit motive, though.

The CHAIRMAN. I have got to turn to Senator Leahy, but I just wanted to ask you, Mr. McGuinn, how has the ability to access music digitally increased interest in your music?

Mr. MCGUINN. Well, I have a bigger consumer base. There are more people who listen to the Byrds. I get e-mail from young people under 20 all the time who have discovered the Byrds basically from listening to Byrds tracks on the Internet. And there is a renewed interest in folk music because I have been putting traditional songs on the Internet, and the publicity that I have generated from doing that has increased people coming to my concerts. So it has been a good thing as far as that is concerned as well.

The CHAIRMAN. That is great. I have a lot more questions, but I will turn to Senator Leahy.

Senator LEAHY. Did we determine whether we owe performing royalties to Creed?

The CHAIRMAN. I decreed that we didn't.

Senator LEAHY. And you know I always follow your decrees, Mr. Chairman.

The CHAIRMAN. That is right. I have noticed that.

Senator LEAHY. Mr. Kan, I was interested in listening to you. We do have .com, .gov, .org. Are we going to do a .geek? Is that what you were——

Mr. KAN. No, Slashdot.org.

Senator LEAHY. I see. I think your suggestions on incentives we should listen carefully to——

Mr. KAN. Thank you.

Senator LEAHY [continuing]. But determining how we make those incentives, though, and doing it fairly, because as has been suggested here, there will be no more music if artists cannot get the benefit of their music, if songwriters, artists, and others cannot get the benefit of that.

Incidentally, Mr. Chairman, I am going to insert an opening statement by Senator Kohl, who is the ranking Democrat on the Antitrust Subcommittee.

The CHAIRMAN. We will keep the record open for opening statements.

[The prepared statement of Senator Kohl follows:]

PREPARED STATEMENT OF HON. HERBERT KOHL, A U.S. SENATOR FROM THE STATE OF WISCONSIN

The Internet has already dramatically changed the way we work, shop and play. And now, with the rise of digital music files known as "MP3s," the Internet is beginning to change the way we listen to music as well. This new technology promises a world of digital music-on-demand; where we can listen to whatever music we want, whenever we want it—instantaneously via the Internet. So, clearly, there is an "upside to downloading" but there's a darker side as well. If we don't meet the challenge that this new technology poses, the intellectual property rights of those who work tirelessly to create and produce music will become devalued.

The threat to our system of copyright posed by the new computer technology known as Napster is easy to understand. Napster permits anyone who is connected to the Internet to obtain, for free and without the copyright owner's permission, a high quality copy of virtually any musical performance. This copy can be downloaded on to a computer hard drive, copied onto a CD, shared with any other user of Napster.

Napster argues that its users are engaging in a perfectly legal activity—the one-on-one “sharing” of music files for non-commercial uses—akin to someone copying a TV show with his VCR to watch later. But it’s one thing for a person to pay a subscription fee or a royalty, download a song, and then make a personal copy of the song to listen to while driving in his car. In contrast, it is entirely different for a college student to be able to sit down at his computer and very quickly find and download the collected works of Bob Dylan, the Rolling Stones, or even Britney Spears to listen to and “trade” with his friends—without paying a cent in royalties. And that is what Napster permits, encourages, is almost entirely used for and plans to profit from.

I don’t know about you, but while they say that this is music “sharing,” it certainly looks to me more like music stealing. Just because my supermarkets were open for people to enter, didn’t give them the right to take things off the shelves without paying.

I sympathize with the many students who use Napster and complain about the high price of CDs. It is rather curious that, over the years, the price of CDs has remained more or less stuck at a stubbornly high level. Indeed, the Federal Trade Commission seemed to agree when they forced the five major record companies to stop their practice of withholding advertising subsidies where retailers advertised discounted prices. But the fact that CDs are expensive does not excuse the wholesale theft of intellectual property on the Internet. We do not allow art-lovers to break into the National Gallery and make off with Renoirs simply because art is expensive.

At the same time however, one must eye the music industry’s doomsday predictions about Napster with a healthy dose of skepticism. The entertainment industry has a long track record of opposing new innovative technologies—fearing they would bankrupt their existing products. For example, the music industry fought against the introduction of cassette recorders, fearing they would harm vinyl album sales. Before that, musicians even opposed LPs, fearing they would destroy live concerts. And in each case, the new technology only made the recording artists and the entire entertainment industry wealthier overall. Indeed, in spite of MP3s and Napster, album sales are increasing this year at a record-setting pace.

The music industry, in my view, must learn to adapt to the new world of digital music rather than try to maintain an old music delivery system that is rapidly becoming obsolete. It must alter its business models and add value to its products to compete with new distribution channels and to prevent unauthorized copying. And with new and potentially more problematic file-sharing tools like Gnutella and Freenet on the horizon, the music industry had best move quickly. But while the industry must adapt to the changing reality of the Internet, it also should not be forced to accept the wholesale theft of intellectual property by Internet pirates.

The CHAIRMAN. We will also put all of your statements in the record as though fully given.

Senator LEAHY. I know Senator Feinstein of California and Senator Schumer of New York have been here with us, and I wanted to clarify one thing. The Senate has T3 inside of our firewall. We don’t take advantage of DSL or virtual private networking for our remote use or telecommuting staff.

While we have been talking, in case some of you wonder what I have been doing up here, I have gone onto Napster and MP3.com, and others. I have been downloading some things, trying to download a couple of versions of “Touch of Gray.” I went from touch of gray to touch of white by the time it got downloaded, it takes so long under the systems we have, although I would mention I would take it any color I could get it, I suppose. But we do move along slowly.

I couldn’t help but think—and I am going to go into some questions on this, but if there are 20 million voting-age Napster users and if they suddenly get cut off, I suspect that even those Senators who are not sure what that large screen is in their office, called a computer, are going to start hearing from these people. But also by saying that, if the parties don’t quickly move to some voluntary li-

censing arrangements, then I suspect there is going to be pressure on Congress to create statutory, compulsory licenses.

There will be pressure for Congress to create a single fee for the writers, the performers, the record companies, and all concerned. Think about that. Frankly, I am not sure everybody is going to be happy with it if we did do that, and I would hope that the parties might continue to work together.

If I could wave a magic wand today and tell you exactly how to do it, and even if you all agreed, from the artists to the providers to the record companies and everybody else—even if you all agreed that you would take my solution, I am not sure what would be the fairest solution. But when you can move so quickly on some of these sites, and when I go on college campuses, as many of us do, to talk and everybody is talking about what they have downloaded, how they share, and so on, and when my kids pick up a “Black Muddy River,” which happens to be one of my favorites of the Dead, and send it to me—they have heard a new version—and I log on in the morning while I am having my breakfast and there it is, I mean this is a whole different world, and I think we have to recognize that on where we go.

Mr. Barry, one of the things I have pulled up here while we have been talking is the new artist program of Napster. Tell me a little bit about that, and tell me what your results have been so far.

Mr. BARRY. Let me describe it first and then I will tell you how we are doing with it. We post on the Web site a special place for new artists where they can voluntarily sign up to have their music promoted on Napster, and essentially what that means is they get a special area within the Web site. They are able to characterize their music for other listeners, essentially do some promotion on their own, and it is going great.

We started in April. We have 17,000 artists who have signed up already from all the 50 States. I would say in every State, over 200 artists have signed up, and we think it is terrific. In fact, it turns out that they are buying music. As you know, records sales are up, and the people who are getting onto the new artists program and looking artists there are also buying things. In fact, they are buying them through MP3.com.

I have an e-mail from an artist who is a member of the new artists program who then went over to MP3.com and did a download over there. So we think Napster is primarily a sampling and a pre-viewing service, and that it is going to be something that we will be able to work with the record companies, both traditional and new.

Senator LEAHY. Well, let me ask a little bit further on that of both Mr. Ulrich and Mr. McGuinn. Again, using this college campus thing, I hear people talk about it, but I also hear from various administrators that they are having a little trouble getting on sometimes their own computer systems because it is, especially during certain hours, very busy.

Have either of you noticed any increase in fan interest since the introduction of Napster, or even talking among—Mr. Ulrich, you and I were talking about a mutual friend of ours who is a recording artist earlier this morning, Sheryl Crowe. In talking with others,

do you see any increase in interest in the music because of, say, Napster?

Mr. ULRICH. Not anything that we can feel. The numbers have not gone particular up, down, or sideways. I mean, the numbers that we monitor in terms of sales and concert tickets are sort of pretty right in line with what they have been for us for the couple of years.

Senator LEAHY. You do monitor those, obviously.

Mr. ULRICH. Absolutely, and we have people that do that for us.

I would like to just make one comment on what Mr. Barry said a minute ago, which I think is really just what all this boils down to. He used the word “voluntarily”; have new artists that are voluntarily on our Napster services. We did not have that option, and what we believe really is that the reason that new bands get the choice to be on a Napster-like service is because they depend and they need the big bands like us to get people into the system.

When we monitored Napster for those 48 hours, I think the most interesting statistic, apart from the 1.4 million Metallica downloads in those 48 hours, was that there was one download, one single download of a file by an unsigned artist. So it is clear that the big bands are the ones that generate all the traffic and attract all the attention. And this whole thing about the new artists, the up and coming artists—of course, they should have those outlets if they so choose, but the bigger bands have never been given that choice.

Senator LEAHY. Sort of the same reason a bookstore puts the bestsellers in the window?

Mr. ULRICH. I think that is a good equivalent, yes.

Senator LEAHY. Mr. McGuinn.

Mr. MCGUINN. I have seen a certain percentage of increase in people coming to concerts as a result of my exposure on the Internet through MP3's, and I would say it is a definite benefit to me. I would be probably in a better position to notice it than a major group that has lots of sales like that. So, you know, I would say it is maybe a 15- to 20-percent increase.

Senator LEAHY. Well, I look at this software that Shawn Fanning did, and we are talking about the kind of technological innovation in this country, whether it is in this or anything else, as the kind of thing we want to promote, not stifle.

Now, Napster may—I don't want to get involved in the court case that is going on here, but let's assume it infringes on copyrights. Well, then if that is the case, you can find out some kind of a licensing scheme, whether it is done, as I said before, negotiated among everybody. Can you negotiate a licensing scheme on the Napster system? I mean, is that possible?

Mr. BARRY. A question for me, Senator?

Senator LEAHY. Sure.

Mr. BARRY. I think that it is possible, but I think you would have to first accept your fundamental assumption that what 20 million people are doing on a regular basis is copyright infringement, that all 20 million users are guilty of copyright infringement. Now, that is what the position has been in the lawsuit. We just don't think that is right. We think that those people are engaged in sampling and previewing, and that both under fair use doctrines and under

the Audio Home Recording Act, what they are doing is absolutely correct.

Senator LEAHY. But at some point, you know, you have to figure out what you do. You don't really have a business model. You have no profits, you have no revenues, but just picked up—what is it—\$15 million in venture capital fundraising?

Mr. BARRY. Thereabouts.

Senator LEAHY. So you have got venture capitalists whom I find, anyway, in talking to them tend to be a little bit more particular in the last few months, with their eyes on Nasdaq and what not.

Mr. BARRY. Yes, sir.

Senator LEAHY. But they are willing to invest in a company that makes no money and is currently mired in litigation being done by hard-nosed business people. Then how do you make a return on the investment? How do you make money? You have got more people coming in than I think AOL did in 15 years or something like that.

Mr. BARRY. Well, the growth has been spectacular. I think that the reality is that we have to remember it is a one-to-one system, a person-to-person system. And reality of our economy, I think, is that if what those people are doing is legal, then we will have the right at some point in the future to work out a business model where we can derive some economic benefit from making that legal activity more convenient.

The index that we host and all the chat and community that goes on there, we are facilitating that, and at some point in the future I believe that we will be able to derive some revenue from that. But I come from the premise that what is going on on the system user to user, this one-on-one non-commercial file-sharing where no one is making any money—and certainly as you correctly point out, we have no revenues today—is correct and legal. And therefore I have to believe that we can make some money from making it convenient.

Senator LEAHY. Let me go to Mr. Robertson. As I said, I was downloading up here. You were doing it a little bit faster than I was able to. You settled a lawsuit with two major record companies, Warner and BMG. You have got EMI, Universal, and Sony who still have legal action against you, and I realize your settlement is confidential.

But I also notice that shortly after you launched the service that led to the litigation, you invited the recording industry to your offices to inspect the new system, and you had mentioned that earlier in your testimony. Some people said that if you had approached the record companies before your launch, you would still be at the negotiating table right now. But you are at the negotiating table because of the hammer of a judgment hanging over your head.

Why can't you work out agreements with these others? If you were able to work it out with two, why can't you work it out with the others? And why didn't you, before you launched the service, seek out a licensing agreement? And if you feel that your answer may hurt you in your litigation, your lawyer is going to reach and grab you and that is OK.

Mr. ROBERTSON. Fair enough. It is important to note that what MP3.com is doing, we believe, is building an infrastructure. We don't own the content, we don't sign bands in the traditional sense.

We build the delivery system for that music. So in that respect, we think that we are partners with artists and labels alike.

However, as we learned last week, BMG has made investments in companies that are doing exactly what we proposed. And we heard earlier Mr. Ehrlich talk about a cyber jukebox, again exactly what we have done with My.MP3.com. So there is very much a competition there, and going to your competitor before you, rolling something out and saying, hey, I would like to talk to you about this new technology, is not a very prudent thing to do.

So that is why we didn't go to the record labels, also because we fundamentally believe that people have the right to load their own CD's onto digital servers and have a company help them do that, and play them back for their own personal enjoyment, not to share with other people, but for their own personal enjoyment.

As for our current settlement, it is true that we settled the copyright lawsuit with two of the five plaintiffs in the case. We have not settled with Sony, Universal, or EMI. We are working hard to do that, but there are some challenges, and I think maybe the question is better asked to Mr. Ehrlich of Sony about why they haven't given us a license to date.

Senator LEAHY. Mr. Ehrlich.

Mr. EHRLICH. As I mentioned before, we have been in active—

Senator LEAHY. We didn't rehearse this, I want you to know.

Mr. EHRLICH. We have been in active conversation. This is a very complex issue and it is something that needs to be done right. And so we are not opposed to the license and we have been in active conversation.

Mr. ROBERTSON. They have been in active discussions with us, I will say.

Senator LEAHY. Yes, and neither Senator Hatch nor I want to go into those aspects because it would not be fair to you.

The CHAIRMAN. Well, I would like to, but I don't think we will.

Senator LEAHY. Yes, I know. We both would love to.

I was thinking last night when I got stuck in an airport for several hours, Mr. Hoffman, I wish I had done as you have and had some of my favorite music along. You are absolutely right. The five CDs in the trunk are going to quickly become such a thing of the past. People are either going to come with their own disc or plug in to have whatever they want. You plan an hour's drive and you may decide what you want and move it around.

I had heard discussion of this earlier. Any encryption can be broken and any kind of a security device can be placed and somebody will find a way to copy it. I think, Mr. Kan, that was probably you who said that. But is that true? Is that really true? Is it possible to work out licensing agreements, whether it is with Metallica, the Byrds, or anybody else, to do this?

The idea of the distribution I find exciting. I see the same thing in movies. I mean, the day will come when I will sit in my farmhouse on a dirt road in Vermont and I want to watch a particular movie and 5 minutes later I will download a digital copy of it. My credit card will be billed and I won't have to drive down to the video store to watch it. And it is going to make great business for the movie companies if you can do it, and it is going to make great

business for the artists. But is there any way of doing that and protecting it?

Mr. HOFFMAN. Well, the interesting thing about copyright law is that it basically assumes the reality of these technologies. There is no real physical way—and I would use the term “physical” as in physics—to keep someone who has access to something from being able to duplicate it. It is kind of a fundamental law. If I can see this, I can copy it. If I get it on my computer, I can duplicate it.

You can have the appearance, but you can’t actually really keep it from happening. The reason is kind of fundamental to cryptography. I actually used to be at PGP, or Pretty Good Privacy, which is one of the leading encryption—

Senator LEAHY. I know. I love it.

Mr. HOFFMAN. If you and I wanted to send e-mail to each other, we could be decently sure that no one else in the room could read it. But I would have to trust you because if I told you company confidential information about Emusic, you could call the New York Times with that same information. So the disclosure problem is always a problem to cryptographic systems.

And the other problem is just more fundamental to how consumers use downloadable music. What customers really want is real strong flexibility, and unlike Hilary’s response to fair use, I will draw some interesting lines. I think it is fair use for you to space shift, as the Ninth Circuit Court of Appeals has said, which is basically taking a CD, putting it on your hard drive, putting it on a portable player.

I think it is fair use inside of your family basically to copy because we are talking about personal performance, personal private use for non-commercial means. I think it is stepping over the line when you make music available to others. But the interesting thing is when you make music available to others, it is pretty obvious, especially if you are at all effective, because if you are not effective, no one cares. If you make music available on your little Geocities Web page and no one ever comes, it clearly doesn’t impact sales of recorded music. But if 20 million people come, well, unfortunately we all have to take note.

The interesting thing is, though—and this is coming back to what I was saying about the Net Act and enforcement—it is not exactly legal to make music or software or whatever is copyrighted available without permission. And, you know, quite a few people have literally plea-bargained out of jail terms on Net Act violations. A college student in Oregon actually was found guilty of pirating both MP3’s and software.

So from that perspective, I don’t think the fair use argument is actually that clouded. I think fair use is pretty simple. If you are doing something that doesn’t replace a sale, you pretty much have a right to do that as a consumer. If you are a business trying to profit from that, you are going to have to license.

One of the important things, I think, also in the kind of debate here is, you know, a lot of people say, well, people should license Napster because clearly you are going to have 20 million voters complaining to you. But it is interesting that that generally penalizes the people like Myplay and others who have done it right, who have basically said we would like you to upload your songs and ex-

ercise your actual fair use rights. We won't violate any laws. In fact, we will work directly with and, in fact, have investment from, in the Myplay case, the major labels and others who are interested in that business, and we will play by the rules.

So it is an interesting situation in some senses because what we are talking about around these systems is private legislation, basically taking copyright usage and using the DMCA's exemption to technical circumvention to be able to really litigate a system without necessarily having the fine ladies and gentlemen in front of us bless or not bless that system.

Senator LEAHY. My time is gone, and I see Senator Feinstein here. As one of the authors of the DMCA, what I am going to do is probably contact a number of you with some follow-up questions on that.

Mr. HOFFMAN. May I make one last point?

Senator LEAHY. Sure, of course.

Mr. HOFFMAN. Interestingly, DVD copy protection was broken not for malice, but frankly what I think was probably a pretty legitimate fair use reason. I believe a Finnish 16-year-old who had a LINEX machine at home had gone with his parents to France and really wanted to be able to view country-coded French movies. I mean, the French are always very excited to have French products exported instead of American products imported.

He reverse-engineered the DVD copy protection system so that he could watch, basically perform his right to a private performance, which by the way here in the United States we specifically have the right to a private performance by any means necessary to be able to watch DVD's. And, in fact, it is interesting that very few DVD's are available downloadably.

But it is questionable whether he is ever going to be able to exercise that fair use, and especially in a situation where the copyright licenses of the operating system he was using, LINEX, are actually somewhat diametrically opposed to the ability to maintain control over a secret system like DVD copy control. So I think it is important to note that the first major challenge, if you will, to the anti-circumvention technology was frankly probably legitimate fair use.

Senator LEAHY. Well, I will just close with this, Mr. Chairman. You and I authored the DMCA, and as one of the authors of it I will go back and look at it more. But I just want everybody to know I love the innovation that has come in this digital world. I am a photographer. I don't get published in music the way the chairman does; I get published in photography. I look at some of the amazing changes in that area in the last couple of years.

So I want to push innovation, but we are not going to have photographers going out doing the work to get the fantastic photographs we want, we are not going to have artists like some of the wonderful artists represented here today, or others who are going to continue to do it unless there is some gain to them. So we have to figure out how to do that, whether it is the incentives or however, and that is what is before us.

So, Mr. Chairman, I appreciate this hearing. I think it has been well worthwhile, and I am delighted the Senator from California, who is one who has spent an enormous amount of time on these subjects, is here with us.

Mr. GRIFFIN. Might I add a brief comment?

The CHAIRMAN. Sure.

Mr. GRIFFIN. We regularly extend enormous amounts of public funds to build and support libraries that have these very same records in them. And they lend them out and they have tape recorders in those libraries and that is where I learned to tape record. And we also have copyrighted materials on the shelves and we have copying machines in those very same libraries. And it is our purpose and our hope that people will share copyrighted materials and to use them, and that is a public policy that our country has had for a long time, and rightly so.

The CHAIRMAN. Senator Feinstein.

Senator FEINSTEIN. Thanks very much, Mr. Chairman. To my way of thinking after listening to this, what I think has happened is that Napster has found a methodology which entirely defeats the purpose of copyright protection. If carried to its logical conclusion, your very strength, which is your large use, is also your Achilles heel. The one saving grace so far is that you are not making money. It is hard for me to believe that venture capitalists gave you money, not to receive anything in return. So I would assume that somewhere down the pike, you are going to make money.

About a week ago, the chairman gave me a CD of his. I haven't had a chance to listen to it yet, but I assume it is copyrighted. Now, essentially, I could put that through your server, and let's say 10 million people wanted to hear it. It would defeat his copyright.

Mr. BARRY. How so?

Senator FEINSTEIN. Because no one would pay anything for it.

Mr. BARRY. Well, sales are up, Senator, and most of the people who sample and preview things on our site are, through the Napster service, then going out—

Senator FEINSTEIN. Yes, but you could then do the same thing—

The CHAIRMAN. I am willing to try it. I will tell you that. [Laughter.]

Senator FEINSTEIN. Same thing with a book. And I don't believe you can go to a library and copy a whole book without violating copyright rights, maybe a part of it, but not the entire book. You could do the same thing with a movie. You could essentially defeat any intellectual property copyright through your methodology, and it is all done under the cloak of anonymity on either end of the server. Now, the question is whether that anonymity is really a cloak to avoid copyright protection or something else. And I don't pretend to know that, but I am very curious.

You say Napster makes no money, is that correct? You are incorporated as a corporation, a profit-making corporation?

Mr. BARRY. Yes. As many Internet companies do, we are going through a period where we have no revenues.

Senator FEINSTEIN. And how do you plan on gaining revenues?

Mr. BARRY. Well, as I said, Senator—you may have been out of the room—what we are planning to do—now, I think, you know, planning is probably an overstatement, but our position is that copyright has always been about a balance. It is a balance between the incentive that we give to the owners of these works to produce

the works and the public interest in having access to those works. So the question is always what is the balance.

And we think that the balance is struck in this particular instance on the side of the activities that are going on in the system. And so I don't want to get too much into our brief with respect to the litigation, but our arguments are there and I would just refer you to that. So we think that these 20 million people are not infringing copyright, and since they are not infringing copyright, there may be a time in the future when we are able—because we are able to provide this community of file-sharing which is a legal activity, we may be able to make money by the fact that we make that convenient to people.

Now, having said that, I just wanted to make sure I respond to Senator Leahy's question here. I want to reiterate that we started talking to record companies the first day I got on the job, and I am continuing that discussion because I think Napster can make money for artists, labels, and for Napster, while still serving the needs of the Napster community. Senator, these people are sharing files one-to-one for no money and no promise of anything in return.

Senator FEINSTEIN. Well, let me ask you this question, and maybe Ms. Rosen is the one to answer it. The record labels, I understand, are claiming that 87 percent of the materials found on Napster are copyrighted and exchanged without authorization. Is that correct?

Ms. ROSEN. Yes.

Senator FEINSTEIN. How would you answer that, Mr. Barry?

Mr. BARRY. Well, without getting too much into the litigation, that is a factual question that is based on their expert survey. Our experts say some other things.

Senator FEINSTEIN. What percent do you say are copyrighted materials that you make available?

Mr. BARRY. I am not sure we know what percentage are copyrighted materials. Remember that the way Napster works is that the users decide what the file names are. When a user on their own personal computer takes an MP3 file and puts it on the computer, they decide what to name that file, and so getting these percentages is pretty difficult.

But one thing we did do with a survey by our expert in the litigation is we found that the type of space shifting that Mr. Hoffman talks about as being exactly the kind of fair use, Senator, where you are moving it over to your MP3 player accounts for at least 36 percent of the use that goes on there. And, traditionally, in Congress under the fair use doctrine what we have said is we are not going to eliminate a whole technology because we think that it may be capable of some sort of infringement.

In fact, the Supreme Court said, look, if a technology is capable of substantial non-infringing uses, not used for substantial non-infringing uses, but capable of substantial non-infringing uses, we are not going to eliminate that technology simply because it might also do one thing or another.

Now, the point here is we are not being sued for infringement. It has never been a claim that Napster is a direct infringer. What is claimed is that the 20 million people who are using Napster are

committing copyright infringement everyday, and we just don't agree with that. If they are not liable, then we are not liable.

Senator FEINSTEIN. I beg your pardon. Why are you not liable if you make it possible to convey a copyright infringement? Instead of allowing anonymity, you could, in fact, as others have done, have the individual's name and address and they would pay a fee and a copyright fee would be paid. But you have chosen not to do that.

Mr. BARRY. Senator, I think these questions really go to the heart of the litigation. It is difficult for me to comment on them. I think that the question of how we preserve the privacy of our users is one that I would be happy to spend some time on. We do preserve the privacy of our users and we think that is appropriate. What we are trying to do right now is to fight this battle. We have been sued by the major labels.

Senator FEINSTEIN. Mr. Barry, you are saying that any publisher of a book could have the same thing done to them. Their copyright would be null and void. Any producer of a movie would have the same thing; the movie could be downloaded. Essentially, you are setting up a technique which could be applied broadly across any kind of written or spoken intellectual property.

Mr. BARRY. Senator, first of all, Napster does not support any of those file types and has no plans to. So I think that we are talking about some future that we don't really know what it is going to be.

And I would suggest to you that these arguments have been made previously with respect to almost every technological advance over the last 100 years, from the piano rolls, through radio and television, through cassettes, through the VCR. And the terrible things that have been prophesied have just not come true. In fact, every time, it has been a great financial boon to the people who are the most concerned.

Senator FEINSTEIN. Could I ask one other question?

Mr. BARRY. Sure.

Senator FEINSTEIN. How many pieces of music do you have being—I am looking for the word—not sold—

Mr. BARRY. Shared?

Senator FEINSTEIN [continuing]. Shared every month?

Mr. BARRY. Well, it varies tremendously because when someone is offline, then the files that are associated with their computer are not available to the other people who are part of the community. So it just depends on how many people are offline. You can actually look on our service and you can see at any one time how many files are there, and I would say it varies between 5 and 600,000 on a daily basis.

Senator FEINSTEIN. Being shared?

Mr. BARRY. Yes, ma'am.

Senator FEINSTEIN. Ms. Rosen, did you have something you wanted to say?

Ms. ROSEN. Yes, Senator, thank you. I know it is not lost on anyone in this room that Mr. Barry is saying they don't actually know what is being copied, but they sure know that we are selling more of it.

Mr. BARRY. Record sales are up.

Ms. ROSEN. I just wanted to address this general issue because so many members of this committee have good histories on bal-

ancing public policy and consumer access to new technologies, and that is that this argument that the music industry and entertainment industries before it, but specifically now the music industry, is against technology and that is the basis for a selected litigation is really silly.

If, in fact, people were trying to keep this technology off the shelf, that might wash. But this is about establishment of new markets. There are people at this table—Mr. Hoffman is one company, Mr. Robertson is another company—that are investing in new businesses using new technologies, paying artists, paying songwriters, paying creative people down the food chain. This is about can the development of new technologies and new businesses using these technologies ever succeed if the rules are not the same for everybody. So this is not an anti-technology argument. This is sort of a selected commercial target and we should not let anybody escape that difference.

Mr. HOFFMAN. Senator Feinstein, may I?

Senator FEINSTEIN. Yes, please.

Mr. HOFFMAN. It may very well be true that record sales are up for the major labels, but I can tell you as the sole proprietor of any business selling MP3's or selling downloadable music in any volume whatsoever \$.99 is awful hard to compete with free for exactly the same content.

And, respectfully, I submit that because our artists and labels, people like Tom Waits, Merle Haggard, on and on and on, choose to go with us and we pay them—we pay them advances, we pay them royalties—and choose to make the content available to consumers, we are allowing consumers to still rip them off, even though they are doing the right thing.

And in the process, I can tell you that Wall Street and my investors tell me that the reason my stock has declined 70 percent, not just because of the April pull-back, is because they are afraid Napster will invalidate the concept of paying for music, period. So I can tell you that my shareholders and I have definitely had financial push-back, and that hurts my artists and labels because it drops the amount of money I can spend to market. It restricts my access to the capital markets for me to go back and raise further funds to be able to fund my business toward profitability, which again further encumbers my ability to sell downloadable music.

Senator FEINSTEIN. So what you are saying is anyone, then, that respects copyright rights cannot survive in this kind of a situation?

Mr. HOFFMAN. It is a really difficult climate out there. Now, having said that, there are opportunities here. We have spoken with people at different file-sharing services. We understand how to do direct enforcement. Now, I don't want to set up an adversarial relationship with my potential customers. I would much prefer to have, frankly, in some ways the police do the police's job and allow, be it the FBI, but it seems like an odd organization to have to do it, enforce copyright laws online because it is a Federal statute that says, gee, even if there is no commercial gain, it is still illegal.

Mr. BARRY. Senator, if I could just respond, I think the point is that what people do on Napster is sampling and previewing, and it helps all the people who are here at this table.

Let me read you from an e-mail from Alex Smith, of the Cynic Project. "We are currently the band who holds the number one electronic and techno song at MP3.com. I have gotten tons of e-mails from people who have found my music on Napster, used the ID3 tag to trace me back to MP3.com and download more of my music. This makes me money. I just want to tell you that not every artist who is out there is against you." So I think that is a great illustration of the power that Napster has to increase interest in music.

The CHAIRMAN. Well, let me ask a question. Senator Feinstein mentioned that the Napster technology uses anonymity to further its business. So maybe, Mr. Ehrlich and Mr. Barry, you would care to answer this. I recently read an article about a Utah songwriter who was giving away a technology application designed to identify digital music pirates.

Now, this technology, called Media Enforcer, was apparently designed to thwart illegal uses of Napster and works by identifying the Napster users' names. I believe it can also reveal the intellectual property addresses of Gnutella users. By allowing copyright owners to identify those who are infringing and possibly bring an action against them, couldn't this type of technology address the illegal piracy concerns that new and, when used legitimately, very promising technologies such as Napster and Gnutella pose?

Mr. KAN. Sir, if I may address that, the IP addresses of both Napster and Gnutella users, although they are possibly revealed by Media Enforcer, are basically meaningless because I, although I sit here today, can have hundreds of Internet accounts offshore where I can infringe from afar, where I am not subject to the laws of the United States, not subject to copyright law as it is laid out in the United States. So, really, IP addresses are particularly a transient thing. They are not a fingerprint for individuals. I can log onto the Internet with a hundred different IP addresses in 1 day.

Mr. BARRY. Senator, that is a good technology. There are lots of other ones. SDMI, the Secure Digital Music Initiative, is something that the recording industry began a couple of years ago. We have, since the early days, been members of SDMI. We are following it and we intend to remain compliant with it as the standard is promulgated.

The CHAIRMAN. Well, I can tell you right now I think I can figure out a lot of ways you can make money with Napster, just like Mr. Andy Grove said. So I have to say that I don't think there is any worry about you making money in the future. The question is how do we solve these problems.

Mr. Ehrlich, do you care to comment? Then we will turn to Senator Schumer.

Mr. EHRLICH. Listening for the last 10 minutes, I have a lot of thoughts, actually, on a lot of the conversations that have happened. First of all, Senator, you mentioned there are other files that potentially could be shared. It is currently happening in the marketplace right now. It may not be happening with Napster, but it is happening at other Internet sites. That is one.

Two, the music industry has been very aggressive in trying to figure out how to sell and how to allow music to be digitally downloaded, and there is a complexity involved in allowing music to be downloaded in a secure fashion. A lot of the companies up

here don't do it in a secure fashion. They don't have any thoughts about paying the artists, anything about intellectual property rights. And so we work with IT companies, CE companies, and others to make sure that our music, when it does get distributed, is distributed in a legal fashion.

The CHAIRMAN. Thank you.

Senator Schumer, we will end with you.

**STATEMENT OF HON. CHARLES E. SCHUMER, A U.S. SENATOR
FROM THE STATE OF NEW YORK**

Senator SCHUMER. Thank you, Mr. Chairman. First, I want to assure the young people in the audience that they can download all my speeches free of charge. [Laughter.]

The CHAIRMAN. We all do it.

Senator SCHUMER. Yes, right.

Senator LEAHY. There goes the Senate server now. [Laughter.]

Senator SCHUMER. I don't sing them, though, for the benefit of the listening public.

Anyway, I also want to thank you, Senator Hatch and Senator Leahy, for your leadership on this issue and having this important hearing. To me, at least, this hearing is part of our ongoing series that particularly is involved in the Judiciary Committee. The Internet has created instantaneous information, the free flow of information. That is what has changed our society. That is what has changed America. Yet, that free flow of information bumps into other societal values.

Today it is intellectual property, tomorrow it is privacy, and finally it is also respecting national boundaries. Mr. Kan keeps mentioning, well, someone could go overseas and do this. I wouldn't recommend that we throw out all drug prescriptions in the FDA because someone can go overseas and not write a prescription. We are going to have to grapple with that as well, and that is not, in my judgment, the right type of answer to just say, well, someone overseas can do it, therefore we should just throw up our hands.

But there are going to be all of these types of balances, and I think that is the number one issue that at least the Federal Government will be dealing with over the next 5 to 10 years. There are some who say government should never be involved. That is not going to be the case. The same people said it when we had our last major revolution. This is the information revolution. We had an industrial revolution, and there were some at the beginning who said government should never be involved. They were proved to be wrong. Child labor laws were needed, minimum wage laws were needed.

I believe we will need some government involvement, but I do want to throw a cautionary note here, which is that when you are dealing with a changing world, and technology changes these things everyday, we ought to be very cautious. We ought to be quite sure that what we are doing is right and balanced, and the burden of proof ought to be on any type of legislation we propose.

To me, at least, it is probably better to have the private sector—at least give them the benefit of the doubt and see if they can come up with something, and that is what my questions will focus on.

I should say at the same time I have been a supporter of intellectual property and copyright protection of artistic works.

Mr. Ulrich, my daughter was delighted to know you would be here. I said the Byrds are going to be here. She said, "Who?" She said Metallica is going to be here.

But if somebody like either Mr. Ulrich or Roger McGuinn creates some property, they ought to have some kind of reward for it. So I don't think anybody at this table disputes either of those, that the free flow of information is important and that we need to reward intellectual property.

But we have to be careful not to deal in false tradeoffs, especially when new technologies are blossoming at sonic speed. And we could pass some law this year that throws off the marketplace and doesn't do the job next year because of new technology. I guess we have to start facing up to the fact in Congress, Mr. Chairman, that while our first reaction is let's pass a law, what really regulates the Internet right now more than law is code.

And as Professor Lessig puts it, the primary regulation of the Net is, "the code of cyberspace itself, the software and hardware that together set the terms or rules or the law of how behavior will be." Well, researchers are working hard and fast to develop new systems through software that give copyright holders better control of their works.

I read in the New York Times last week that there were three Brown University professors, mathematicians actually, who have patented an encryption code, and they say that it will make it impractical or impossible to infringe on copyrighted data like digital music. Now, if they are right, then we may be faced in the future with whether the perfect control offered by code goes too far or restricts appropriate uses like parody or commentary or personal use.

I know Senator Leahy touched on this a little bit, but I guess my question to the entire panel is just their view. Will code like the encryption of digital music files, the use of trusted systems, down the road, because there is going to be a demand for it—just listen to Mr. Ehrlich and others—will that create sufficient copyright protection, not enough, not too much, but just right? Why or why not? Do you buy the argument that the digital music issue may end up playing out more in terms of code than in terms of law?

Mr. GRIFFIN. I think it will be dealt with by business models, and I say this because I think none of this is new. I think that in the 1920's we learned that we could give up control over quantity and destiny of content, but still make more money. In other words, radio came along and said we will take your music, we will take your sporting events, we will broadcast them to, we do not know how many people, and we do not know what they will do with it afterwards.

Likewise, television did the same thing, and when DirecTV came before Congress, having been found guilty of violating copyright laws, never having sought licenses in advance, our response was to grant them a compulsory blanket license. So I think each time we find that we cannot control quantity or destiny of what we call intellectual property, we find it to our advantage and we find a way to monetize it, and we do it by creating pooled compensation funds and finding a fair way to deal with it.

And that is and should be the province of private industry, and if there is any necessary public oversight, such as through the courts as occurs with ASCAP and BMI, that will happen. And we are advantaged now by the notion that we know how large the audience is. We can at least count through digital means.

And so I think it clear that this market will evolve not as a new market, but as an extension of what happened in the 1920's. And the sad truth is that so many of those people who created these great industries are not around to guide us now. I think it is just the passage of time; 80, 90, 100 years leaves us now grasping, but they could give us the best guidance. How did they deal with it when it first became possible through public address or radio or television to take quantity and destiny away from artists? And I think we will deal with it much the same way.

Senator SCHUMER. Go ahead, Mr. Kan.

Mr. KAN. When I was in high school, I was reasonably close to the pirate community.

Senator SCHUMER. Was that a couple of years ago? [Laughter.]

Mr. KAN. Yes. Yesterday, before I graduated, I was a software pirate on BBS networks, like many of my friends, in fact like millions of youth around this country. And in those days, modems were slower and the pirate community was really a closed community. Things were not very fluid at all. There was not a lot of liquidity.

But now with the Internet, and combined with sort of pirate groups who are willing to pay for—so I am really going to respond entirely to the encryption idea.

Senator SCHUMER. Yes, OK, because Mr. Griffin had a different methodology, but let's hear about all of them.

Mr. KAN. So I would like to respond to the encryption idea, and that really is that, OK, so you can encrypt this file and lock it down and make it so that only the people who pay for it can view it or listen to it, or whatever. Well, pirate groups always were releasing what they called zero day wares. They would go to the store, buy a copy, release it for free, and because of the infinite fluidity of the Internet, you don't have to be a pirate anymore to have access to that stuff. You can just be anyone on AOL using Napster or Gnutella or whatever.

And pirate groups are going to be willing and happy to contribute their small bit to buy a decryption key for a particular piece of encrypted media, and they will be happy to share it among their friends. And because of the fluidity of the Internet, it will be world-wide in seconds.

Senator SCHUMER. All you need is one or two of these pirates, I guess.

Mr. KAN. Exactly, one person to release it on Napster. I know the title of the next Metallica song or whatever it is and I am going to be on Napster searching for it—well, not me, necessarily, but millions like me.

Senator SCHUMER. Does everyone agree with what Mr. Kan said, that because a pirate can decide, for whatever reason, to put the music out there that encryption is sort of useless?

Mr. KAN. Locks, I think, aren't the answer.

Mr. HOFFMAN. Let me step into this for just a second.

Senator SCHUMER. Go ahead.

Mr. HOFFMAN. We have been through this recently, and it is interesting that there is no one else from the software industry, except for Hank, basically sitting up here.

The software business started out and it was a really expensive product and it was encrypted, and everybody hated it. It was called Lotus 1, 2, 3. And Borland released Quattro Pro and dropped the price by about a factor of 10, made it unencrypted, and it sold like mad.

Well, what was interesting is that went on for a while, and then basically pricing pressures due to piracy started to creep back into the software business. And it got worse and worse, and the Software Publishers Association, who has changed names twice since then, I believe, was unwilling to take the radical step of enforcing against end users.

So Microsoft and a few other companies started the Business Software Alliance. And just last week I was listening to the radio in my car and it said, call 1-800-PIRATE and turn your company or individuals in for software piracy. It is amazing how hard it is to find pirated software these days. If you are in the specific elite fringe and you know how to use IRC or other very difficult protocols, you can do it, but it is a very tight-knit community.

The issue is scale. Your average user is not really willing to risk the Net Act consequences, basically, of making software available because software companies like Adobe and Microsoft and others significantly disincentivize them. But I would say the relationship between software publishers and users is considerably different than artists and consumers.

Senator SCHUMER. Right.

Mr. HOFFMAN. In fact, that is why I continually speak about the fact that I think there are concerns not with copyright law, but with how we do enforcement because right now the only option to really get redress is either to go after a contributory copyright infringer, which opens up all sorts of very difficult questions—I mean, sitting here with me, I would like to have Hank as a business partner because I think it is an actually very interesting network and there are interesting ways I could use it to promote the 600 independent labels that we have.

What I am concerned with is actually his end users who are cheating, but I don't want to be the person seen to be the bully, nor do I want my artists to be seen to be the bully. That frankly is what the police are there for, and whatever that function ends up being to enforce the law we already have in the land, I think that is where we have to go.

Senator SCHUMER. Yes, Mr. Ehrlich.

Mr. EHRLICH. We fundamentally believe that honest people want to continue to be honest, so the issue on whether or not there will be people out there that have hacks to security—we envision that is going to happen, but we also envision, with time, technology will get better and better, and hopefully there will be a situation where we are predominately comfortable with the fact that security exists, and exists the way that we need it to exist for our artists and our labels.

Senator SCHUMER. So you are optimistic about encryption technology working, despite what Mr. Kan says?

Mr. EHRLICH. Well, I think, again, the various iterations of encryption technology—and a lot of these conversations are going forward. You know, we have a lot of music right now that it is going to be very difficult to pull back, so a lot of it is going forward. We do believe that there are going to be better and better technologies that will allow it. Will I say there will be a 100 percent certainty of security? I can't say that. I don't think anyone can say that.

Senator SCHUMER. You don't have that now.

Mr. EHRLICH. Right, we don't have that now. Do I believe there will be better iterations in the future? Yes.

The CHAIRMAN. Let me ask just one final question to all of you, if I can.

Senator SCHUMER. Mr. Chairman, I think Mr. Barry wanted to say something.

Mr. BARRY. Just briefly, I would say I agree with Mr. Ehrlich. I think that the point you made, Senator, about there not being any encryption or other even identification with respect to the files that are on CD's today is an issue. And this point about sampling and previewing by sending things by e-mail to your friends and by FTP file transfer, that was going on long before Napster, and it was going on because there are no ID's in any of these files.

I am sorry, Senator.

The CHAIRMAN. No. That is fine.

Mr. ROBERTSON. If I could add one thing, and that is the focus on encryption entirely misses the point. The focus is on building revenues. How do you build an industry that grows the revenue base and then fairly compensates those that are producing the content?

In fact, securing music—we know this from even the Internet's short lifespan—securing anything reduces the revenue, not grows it. That happens with software. It is interesting to look at newspapers. When the Net first came along, they said, well, we have got to lock up our news stories because people will get them online and no one will subscribe to our newspapers.

Well, it is very interesting to go to a newspaper site today and you will see a button there that says e-mail this article to everyone you know. They have gone the exact opposite way because they have realized that—

Senator SCHUMER. In all fairness, some have, some haven't. Some newspapers still go for the limited "we'll charge" model, and some let it all out. I don't know which one will prevail.

The CHAIRMAN. Well, let's ask just one last question on behalf of Senator Leahy and myself, and we will start with you, Mr. Griffin, and just go across. I would like short answers because we are way overdue here. Let me just ask this one final question that both Senator Leahy and I are concerned about, and that is at what point should Congress consider whether legislative action is warranted to ensure that Internet music is made available to consumers and that artists are compensated? And should we consider a compulsory license for Internet music or a clarification of the fair use doctrine in this area?

So let's start with you, Mr. Griffin. Have you got those two questions?

Mr. GRIFFIN. Sure.

The CHAIRMAN. And then we will go right across. If you could give short answers, we would appreciate it.

Mr. GRIFFIN. Sure. I think that the clear answer here is that you need to engage in oversight like you are today, precisely in the fashion that you have, to determine if licensing is occurring. And if there is not an environment that provides for fair, reasonable licensing, then perhaps you will need to step in to ensure that this occurs, much for the same reasons that you did in the DirecTV case.

The CHAIRMAN. So it comes down to reasonable and fair licensing?

Mr. GRIFFIN. Media or television, much the same way. We can only have these industries created if we have reasonable, fair licensing occur, and this kind of oversight leads to that. And I would say, too, you should consider a commission, as the National Academy of Sciences suggested, to continue to examine and extend your own oversight of these areas so that it can occur also in other rooms.

The CHAIRMAN. These are complex areas.

Mr. GRIFFIN. Yes. Thank you.

The CHAIRMAN. Thank you.

Mr. Kan.

Mr. KAN. I agree largely with Mr. Griffin. I believe that legislative oversight in this area is particularly good because it affects not only the music industry, but already today I can download a movie to my hard disc.

The CHAIRMAN. Yes. We didn't even get into all the other applications.

Mr. KAN. Yes. I can download a reasonably good-quality movie in about an hour. And broadband is only increasing around the world, particularly in this country. A reasonable and fair license is definitely needed. Clarification of fair use, I think, is definitely needed. It seems to be really the subject of so much discussion and things. Probably, you know, some clarification would really eliminate that.

And the last thing I wanted to say is I think that really the best thing that could come out of this is a general framework that allows everyone to profit and allows everyone to access their music conveniently, and tomorrow their movies and who knows what next.

Thank you.

The CHAIRMAN. Thank you.

Mr. Hoffman.

Mr. HOFFMAN. To try to answer your questions quickly, as to a statutory license in sound recording, I don't think it is time yet. But I do think that the Senators shouldn't forget the power of the pen to influence those people who have to work together. I mean, you can force all of us to have real important dialogues by simply saying that that is something you expect us to do.

As far as legislative remedies and such, I don't think the legislation is that bad right now. I think the copyright law as it stands is either well-defined or will shortly be defined by the various Federal courts out there with the more interesting questions that are

in front of them. I think that DVD-CCA and the DVD anti-circumvention case are going to be very enlightening as they go through the appeals process.

So I think right now legislation is not what we need to be looking at, but I do think we need to start addressing how we are going to enforce the Net Act because I think that is really what we are talking about here, is the death by a thousand cuts.

The CHAIRMAN. Thank you.

Mr. Ehrlich.

Mr. EHRLICH. I agree that legislation is not needed right now. I believe in the private market, it will set itself right. We are in constant conversations with companies on licensing and selling our music, and we believe it will be worked out in the private marketplace.

The CHAIRMAN. Hilary.

Ms. ROSEN. I think that is right, Mr. Chairman. I might feel differently in a year, but I think that the copyright law is adequate now, and I don't think that anybody should be fooled that the problem with some of these services like Napster is that we won't give them licenses. They just haven't asked. So I think the marketplace is working and I am glad that you have held this hearing today.

Senator LEAHY. If you feel differently in a year, I assume we can feel comfortable in knowing that you will let us know.

The CHAIRMAN. I have the feeling you will let us know.

Ms. ROSEN. I have your phone number.

The CHAIRMAN. Mr. Robertson.

Mr. ROBERTSON. I think there is no doubt there needs to be clarification of fair use. When the chairman asks Hilary, can you copy a CD to a tape, and she cannot or will not answer, I think that in itself indicates that there is need for clarification about fair use for your own personal use, especially property which you own.

As for compulsory licenses, I detest them because you are guaranteed to be one of two things, too expensive or too cheap, and that is the dilemma that we face. However, in this environment that we have where we have companies at all ends of the spectrum, it is important for them to get licenses.

We have license from two of the major record labels, but the publishing side is an absolute disaster, and it is not clear that we will be able to get the publishing licenses that are required for us to turn on this service. I think in that light, Congress has to look closely at some sort of input in the future.

The CHAIRMAN. Thank you.

Mr. Barry.

Mr. BARRY. I think you should continue your oversight. I applaud you for the hearing today. I think that we should let the market work and let history be our guide with respect to not squashing these technologies too soon.

The CHAIRMAN. Thank you.

Mr. McGuinn.

Mr. MCGUINN. I don't feel that legislation is necessary at this point either. I think the market will work itself out, and I think people should realize that the publicity aspect of music being available on the Internet is really important, much as it is with radio. Record companies give CD's to radio stations and encourage them

to play them, and people can tape off the radio. So, you know, it is not new that people are getting free music over the airwaves or however. I think there is a lot of worry about nothing in some ways here.

The CHAIRMAN. Thank you.

Mr. Ulrich.

Mr. ULRICH. I feel that the legislation should definitely be part of this soon. I think that we all are dreaming if we think that we can work this out between us. I think the issue is too deep on many, many levels, and I think that ultimately I think it comes down to a sort of fundamental look at the whole situation.

We have sat here and you have heard many different points of view on this, and obviously when companies like Napster sit down and talk about sharing and trading and swapping of music, and talk about what a good thing it does, what it does for the record industry and all this type of stuff, when artists like myself have a completely opposite view—we have tried to have a little bit of dialogue with some of these people and I don't feel that there is going to be a situation where we can work this out without your involvement. So we look forward to that.

The CHAIRMAN. Well, thank you. What I think we are hearing is that fair and reasonable licensing needs to take place. Now, that is not happening currently, apparently, except there is an offer to do it. At least that is what I am hearing.

So we will be watching this very closely, and we would appreciate continual education from you. Feel free to write to us and to send us information because we want to do what is right here. We don't want to interfere with these great industries, but we sure as heck want to make sure things work right and that the law works right. We want to thank each and every one of you for being here today. This has been a really interesting hearing, and I think one that will have a dramatic impact over the next number of years. So you haven't wasted your time.

I would like to come down and shake hands with each of you. So with that, we will recess until further notice.

[Whereupon, at 1 p.m., the committee was adjourned.]

QUESTION AND ANSWERS

RESPONSES OF FRED EHRLICH TO QUESTIONS OF SENATOR HERB KOHL

Question 1: Please respond to the following hypotheticals. For each hypothetical, answer whether or not you believe the practice would violate copyright laws. Explain why or why not, and, as a policy matter, whether you think it should violate copyright laws.

(A) An individual goes on a music website, clicks on a song track and listens to the song on his computer—without downloading it to his hard drive.

Assuming that the music site is legitimate (such as webcaster licensed to render interactive public performances), neither the music site nor the individual who requested the transmission from the site would be liable for infringement.

(B) An individual goes onto the music website, clicks on a song track and downloads it to his hard drive for later use.

Assuming that the music site is legitimate (such as a retail site authorized to make promotional downloads), neither the music site nor the individual who requested the transmission from the site would be liable for infringement. Of course, the situation would be different in the case of a pirate site of the kind that courts have enjoined on a number of occasions.

(C) An individual takes a downloaded track and e-mails it to a friend.

The individual's unauthorized reproduction and distribution of a new copy would seem to be an infringement unless authorized by the copyright owner, although it is hard to imagine a copyright owner interested in taking action against such occasional limited distribution among friends. Indeed, record companies are taking advantage of new technologies to enable and legitimize just this kind of distribution.

(D) An individual or company creates a searchable file-transfer program to make it easier for all of his friends to find and transfer each other's music files among themselves.

Use of such a program to reproduce or distribute copyrighted works without the authorization of the copyright owner would seem to be an infringement. However, as above, it is hard to imagine a copyright owner interested in taking action against such use if it really was limited to distribution among a few friends (as opposed to a circle of millions of anonymous online "friends" worldwide). The maker of the program would also be liable for infringement if its conduct meets the tests of contributory infringement or vicarious liability. If, for example, the program was designed primarily to reproduce or distribute copyrighted music without permission, then it would give rise to liability for infringement.

(E) An individual or company creates a searchable file-transfer program and allows the general public to use it to download and transfer music files to others, intending to derive profits from the program.

As above, the maker of the program would be liable for infringement if its conduct meets the tests of contributory infringement or vicarious liability. If the maker of the program not only distributed the program but also operated it knowingly to provide an online "flea market" for the distribution of copyrighted recordings like Napster, those tests clearly would be satisfied.

(F) An individual or company creates a searchable file-transfer program, intending to derive profits from the program, and allows the general public to use it to find and listen to one another's music files—without the users' actually downloading the music files onto their individual hard drives.

Use of this program to render unauthorized interactive public performances would violate the Digital Performance Right in Sound Recordings Act. The maker of the program would also be liable for infringement if its conduct meets the tests of contributory infringement or vicarious liability.

RESPONSES OF FRED EHRLICH TO QUESTIONS OF SENATOR STROM THURMOND

Question 1: Mr. Ehrlich, when the recording industry started backing the compact disc as a new medium to replace vinyl, record store owners were very slow to adopt the new technology. For years, CDs were shipped in throw-away cardboard "long boxes" because the record stores would not modify their vinyl racks to accommodate compact discs. Do you expect any resistance by traditional music retailers to the recording industry's attempts to exploit the internet?

Answer: Traditional music retailers are in far better position than me to discuss their reaction to the new business models made possible by the Internet. However, I expect that many traditional retailers will embrace new forms of music distribution. Already many retailers have formed partnerships with record companies in offering digital downloads, kiosk services in their stores, and other innovative offerings. I'm confident that together we can draw on our years of serving music fans to create new services that create a better music experience for those fans than ever before possible.

Question 2: Mr. Ehrlich, as the recording industry explores methods of using the internet to develop artists and create demand for music, do you see any implication for traditional broadcasters?

Answer: The recording industry and traditional AM/FM broadcasters have historically enjoyed a mutually beneficial relationship. I see no reason why the creation of additional opportunities for consumers to use the Internet to access the music they love should affect the way people enjoy music from local, over-the-air broadcasts. Moreover, broadcasters are beginning to offer their programming on the Internet, too, so even "traditional broadcasters are becoming Internet music services."

Question 3: Mr. Ehrlich, if the recording industry does not keep pace with technology, it risks forfeiting any ability to profit and exploit new technology. For example, it appears that MP3 format has obtained a sizeable head start on the music industry's SMDI format. How do you respond to the argument that the recording industry is not moving as fast as it should in adopting to new technologies?

Answer: As my testimony and the continuous stream of press reports show, record companies and others in the music industry are working hard to harness the power of new technologies to offer consumers new opportunities to access music. They have done this both by launching their own Internet music services and by licensing oth-

ers to use their music on the Internet. I have attached a list of some specific initiatives in this regard.

These efforts have taken time due to the enormous complexity involved in making sure that these new services respect the rights of recording artists, songwriters and record companies. However, it is unfair to compare these efforts to the relative speed of those who have launched infringing services. They can move quickly because they make music available without worrying about obtaining licenses, honoring artist contracts, paying royalties to songwriters or creating a secure system. When viewed in the context of other types of content being made available by companies "playing by the rules," legitimate music services are being developed as fast or faster than many other forms of Internet distribution.

Finally, a clarification regarding SDMI. SDMI is not intended to create a format to compete with MP3. In fact, it is not intended to create any specific format. Rather, it is intended to specify a minimum level of security that will provide consumers a better music experience using whatever specific technologies work best (including MP3 or other compression technologies) while also respecting copyrights.

Question 4: Mr. Ehrlich, compact discs are arguably much cheaper to produce than are records and tapes. Consumers were willing to pay a premium for compact discs in order to obtain the better sound quality and features associated with that medium. But now, it appears that consumers expect to pay far less for digital music downloaded over the internet. Will the recording industry be willing to pass on the distribution and manufacturing savings of internet music to consumers in the form of lower prices?

Answer: The recording industry is intent on doing much more than simply replicating the consumer's experience with CDs through an Internet service. There are—and increasingly will be—a wide variety of music services with different features, including services offering webcasting, on-demand streaming and downloads. Some of these services will be provided without charge, others will have promotional features like "try before you buy," and others yet will have usage-based charges or be provided on a subscription basis. Like everyone else in business, the companies that offer those services will determine appropriate pricing based on many factors, including their cost structure and competitive considerations.

RESPONSES OF GENE KAN TO QUESTIONS FROM SENATOR THURMOND

Question: Mr. Kan, you have proposed a system where individuals and/or businesses would charge a fee for offering music to the public, via Gnutella or something that functions like Gnutella, and then share the proceeds of the fee with recording artists. Under your proposal, would there not still be a need to shut down pirates who offer music downloads for free? How would such a system deal with artists, such as Metallica, who wish to opt out of this method of distribution?

Answer: Artists should be compensated for their works in some way. The exact way is under question right now, and is hotly debated on the various industry discussion groups, some of which I participate in.

The idea that there would be localized piracy in spite of a widespread payment system for downloaded music is definitely a concern. Evaluation of the importance of the piracy comes down to its scale.

This is the primary reason I proposed a business model in which incentives are employed to promote pay-for-download. Most other proposals for pay-for-download are mainly about enforcement, not encouragement. Enforcement on the fast and wild Internet is even more difficult than in the physical world, where there is rampant piracy despite the best efforts of industry and law enforcement.

In an incentive model, the people who are providing the downloadable content are financially motivated (not financially threatened) to profit from downloaders. If we sort of extrapolate the desire to profit, we can see that file-sharers would only allow paying customers to download from them.

The reason is simple: Internet connections have finite capacity. If I can squeeze ten downloaders onto my Internet connection, I would want ten paying customers, not ten freeloaders.

In this scheme the content provider acts as a merchant, and he will see to it that customers pay, as all merchants do.

Any piracy will be minimal, since even pirates want to make money. Sure there will be as mattering of piracy, but those pirates are going to turn right around and resell the music they pirated. And when there is only one payment network. Those pirates won't actually be pirates: they'll be legitimate merchants.

Let me try to answer the second part of your question about artists who want to opt out of this system.

It will be very difficult to opt out. Music is fundamentally easy to duplicate and distribute, especially on the Internet. No physical exchange needs to take place. The zeroes and ones just float easily around the ether.

In such an environment, it would be very difficult for a group to police the distribution of its work. That does not mean it's difficult to profit (in fact it's easier), as I said in my answer to the first part of your question.

Policing the distribution of content which is easy to replicate on what is a progressively larger and faster Internet will be nearly impossible. As Madonna and Dr. Dre saw, once one copy gets out there, it is rabidly consumed.

If the infrastructure to ensure profitability exists then the only artists who would want to opt out of this are those who are philosophically opposed, for whatever reason. Unfortunately we may not be able to help those artists.

Just as Luddites find it difficult to entirely avoid modern conveniences, it will be difficult for groups to completely divorce themselves from the Internet.

RESPONSES OF GENE KAN TO QUESTIONS FROM SENATOR KOHL

Senator Kohl: I'll keep these answers short since I'm no legal expert. My answers are purely based upon my opinion of what "should" be reasonable to do.

(a) An individual purchases a CD and makes a tape recording of it to listen to in his car.

This sounds reasonable. My understanding is that this is even okay under the Fair Use constraints of the various recording acts. It was found to be okay by the Diamond Rio suit a while back. But I see that suit has been refiled, so this point is in litigation again, I think.

To borrow from what I know of software law: it's okay to make a backup copy.

(b) An individual purchases a CD and makes a tape recording of it for his wife to listen to in her car.

I'm not so sure this is acceptable. If the two people can listen to the recording simultaneously, then it's hard to justify that this is an acceptable practice in the current copyright regime.

But if this is getting into the husband's true intentions for the duplicated tape that seems pretty messy.

So, to summarize: seems reasonable, but dubitably acceptable.

(c) His son goes onto a music website, clicks on a song track and listens to the track on his computer without downloading it to his hard drive.

Apparently this is widely acceptable behavior as long as the guy on the giving end doesn't try to capitalize on the child's listening of the recording.

This is sort of like hobby radio stations. They may or may not be absolutely legal, but they are largely ignored by copyright holders.

(d) His son goes onto a music website, clicks on a song track and downloads the song onto his hard drive to listen to later.

If he owns the physical media for this, I don't see how anyone could argue that this practice is unreasonable. This goes back to question A.

If it's okay to make a backup copy, or a copy in a different format, then this should be okay too.

If the child doesn't own the physical media then this is really what is at question in the Napster case. I believe that if the child is previewing the music, he should be allowed to do so.

Many record stores encourage the previewing in the store. Why not extend that to the convenience of the Internet?

(e) His son takes the downloaded track and burns it onto a CD to listen to in his car.

If the child already owns the physical media for the song, then this should be acceptable. He'd be creating a copy with degraded quality.

But this is actually quite interesting, because many DVD players and recent car stereos are able to play MP3 CDs. This is where the CD stores MP3 files. On one CD it is possible to store 150 full-length songs. That's pretty compelling.

So yes, this should be entirely acceptable as long as somewhere along the line the child paid for the music.

(f) His son takes the downloaded track and e-mails it to his friend.

If you believe that emailing tracks is sort of a word-of-mouth marketing device, then this should be more than just acceptable: this should be landed by the by the copyright holder.

People have been giving each other mixed tapes forever. Email is just an extension of that.

RESPONSES OF ROBERT H. KOHN, CHAIRMAN, EMUSIC.COM TO QUESTIONS FROM
SENATOR KOHL

EMUSIC.COM, INC.,
Redwood City, CA,
September 22, 2000.

Hon. ORRIN G. HATCH,
Chairman, Senate Judicial Committee, Washington, DC.

DEAR SENATOR HATCH: This is in reply to Senator Kohl's request of my colleague, Gene Hoffman, for our response to several follow-up questions about the legality of certain activities relating to the digital transmission of musical recordings. Gene and I are co-founders of Emusic.Com, Inc., and because I have previously written extensively on the subject (See, *Kohn On Music Licensing*, Aspen Law & Business 1992-2000), Gene asked that I submit the following response on behalf of the company.

Specifically, you've asked whether or not we believe the practices set forth in scenarios A through F below *would* violate the copyright laws, and whether as a policy matter, that *should* violate the copyright laws. For the purpose of our answer, I start with the assumption that (a) all of the tracks in question contain both a sound recording and an underlying musical work, (b) a valid copyright subsists in both the sound recording and the musical work, and (c) no permission to effect the transmission (i.e., stream or download) in question has been granted by the owners of either copyrighted work.

A. An individual goes onto a musical website, clicks on a song track and listens to the song on his computer—without downloading it to his hard drive.

Answer: Yes, the foregoing activity would violate the copyright law, and, as a matter of policy, it should violate the copyright law.

Discussion: A more precise answer demands that we make a distinction between a *sound recording* and a *musical work*, and the various exclusive rights for each under the Copyright Act (17 U.S.C. 101, et. seq.).

Sound recording

The person permitting the "stream" would clearly be violating the exclusive *right to make digital audio transmission* (under 17 U.S.C. Section 106(6)) of owner of the copyright in the sound recording, unless there were an exemption under Section 114. Since the transmission is clearly *interactive*, no such exemption should apply.

Musical work

A. The person permitting the "stream" would clearly be violating the exclusive *right of public performance* under 17 U.S.C. Section 106(4)) of owner of the copyright in the musical work.

Such person could avoid liability for infringement by obtaining permission from the copyright owner. Such person may be obtained on a "blanket" basis from the applicable performance rights society (e.g., ASCAP, BMI, or SESAC) representing copyright owner with respect to the work, or by obtaining a license directly from the owner of the copyright, usually a music publisher.

B. Would the stream also constitute a violation of the musical work copyright owner's exclusive *right of reproduction* under Section 106(1)?

Herein lies a controversy that should be resolved by Congress, a Copyright Arbitration Royalty Panel, or the Courts.

The music publishers have taken the position that songs digitally streamed from *interactive* services constitute digital phonorecord deliveries, even if no digital copy is, or can be, made by or for the intended recipient of the transmission. However, the interactive transmissions of purely streamed copyrighted musical work would be subject to the compulsory licensed set forth in 17 U.S.C. 115, requiring payment of the statutory compulsory license fee of 7.55 cents per stream.

Opponents, which include an unusual alliance among the Internet community (i.e., those who don't want to pay anything, if they can avoid it) and the traditional record companies (i.e., those who don't want to pay music publishers, if they can avoid it), suggest that this would amount to "double-dipping" on the part of the music publishers. If a performance royalty is required to be paid to ASCAP and BMI for the stream, why, they say, should a reproduction royalty *also* need to be paid?

The music publishers argument may be stated as follows:

- Technology developed for use to facilitate the listening of these streams have made it trivial for the listener to convert the stream into a download;

- The stream in question is not like a stream of a traditional raid broadcast, consisting of a series of tracks in some random or programmed order which listeners are not likely to copy, but an *interactive* transmission where the listener may know

in *advance* exactly what will be streamed to his or her computer and can prepare for it (i.e., prepare to download or save it to his or her hard drive;

- Accordingly, interactive streams of musical works will tend to displace sales of CDs and digital phonorecord deliveries, transactions which typically earn them a compulsory mechanical reproduction fee.

- Moreover, the saving of the transmission to your disk as a downloaded file eliminate the need for further public performances of the work, because when a listener listens to the rendering of a file that has been downloaded to his or her computer, as opposed to listening to a stream from a website, the rendering is a private performance;

- Since music publisher's have no exclusive right of private performance under the copyright law, only public performances, no further public performances royalties will be collected on performances rendered after the file has been downloaded (i.e., you only have to stream the file once and save the stream to get an infinite amount of performances from it);

- To the extent public performance royalties are reduced, they should be replaced by a mechanical reproduction fee, similar to that which music publishers typically collect upon the sale of a CD or the sale of a digital download;

This argument, in my view, is compelling, even though it may mean the collection of both a public performance fee and a reproduction fee for the same transmission (but I'll deal with that below). Moreover, legally, under the current copyright law, the music publishers may be right. They take solace from a very specific provision that was in the Digital Rights in Sound Recording Act of 1995 which is now part of the compulsory license provision at Section 115(c)(3)(L): "The provisions of this section concerning digital phonorecord deliveries shall not apply to any exempt transmissions or retransmissions under section 114(d)(1)."

In the view of the music publishers, the above language implies that the provisions concerning digital phonorecord deliveries, while not applying to any exempt transmissions under Section 114(d)(1) does in fact apply to those transmissions that are not exempt under Section 114, which would include all transmissions made as part of interactive services. Thus, according to the argument, the transmitter must pay a mechanical reproduction fee, subject to Section 115's compulsory license, or about 7.55 cents per interactive digital audio transmission, whether or not a copy results in the recipient.

Nevertheless, music publishers have not appeared to have taken an unreasonable position on the issue. First, they recognize that an interactive transmission of a song that is of a short duration and which is not intended to result in a copy being made for the intended recipient, is not likely to have an effect on the sale of a CD or a full digital phonorecord delivery of the song. Accordingly, the music publishers have informally let the record and Internet industry know that they will allow such interactive transmissions without requiring payment of the statutory fee if (a) no more than 30-seconds of the song is transmitted and (2) the transmission is effected by or with the permission of the owner of the sound recording embodying the song. (Note, this does not allow anyone to make such 30-second transmissions, only the record company who owns the recording, or its licensees).

Second, Section 115 refers to something called an "incidental" reproduction or distribution.

"* * * Such terms and rates shall distinguish between (1) digital phonorecord deliveries where the reproduction or distribution of a phonorecord is incidental to the transmission which constitutes the digital phonorecord delivery, and (ii) digital phonorecord deliveries in general." 17 U.S.C. 115 (3)(C).

The music publishers are willing to admit, at least privately, that they would be willing to consider interactive streams intended as mere performances, where copying to hard drivers is merely incidental to the transmission, are these very same "incidental" reproductions. The quoted portion of Section 115 above appears to contemplate that incidental reproductions may have a lower compulsory, statutory rate than full digital phonorecord deliveries.

It is our view that this is where this controversy can and should be resolved. Allow the collection of both a performance fee and a mechanical reproduction on these interactive transmissions, but recognize a lower mechanical reproduction rate for incidental reproductions. Of course, no mechanical reproduction fee should be charged for non-interactive transmissions. However, where the transmission constitutes an incidental digital phonorecord delivery, it would appear that once the statutory royalty is paid, no further royalties would be due, including performance royalties (to ASCAP or BMI).

C. Would the stream also constitute a violation of the musical work copyright owner's exclusive right of distribution under Section 106(3)?

No, because the distribution right only applies to the distribution of copies or phonorecords, each of which are defined as material objects. Thus, the “stream” in question, which does not involve the transfer of possession of material objects, does not constitute a distribution. The word “delivery” is better terminology than distribution in connection with digital transmissions that result in reproductions (i.e., downloads).

B. An individual goes onto a music website, clicks on a song track and downloads it to his hard drive to listen to later.

Answer: Yes, the practice would violate the copyright law, and, as a matter of policy, it should violate the copyright law.

Discussion: Again, we make a distinction between sound recordings and musical works, and the various exclusive rights under copyright.

Sound recording

There should be no controversy about the answer to this question: persons desiring to make digital phonorecord deliveries of sound recordings must obtain a license from the person who owns the recording, which is typically a record company. Further, unlike for the use of the underlying song, there is no compulsory license for these kinds of digital audio transmissions. In other words, you must obtain permission from the record company and the record company can charge whatever it likes or even refuse to grant you permission to make the transmission.

The reason for this is straightforward: digital phonorecord deliveries directly replace sales of phonorecords. Without such sales, the purpose of the copyright law will be defeated: Record companies would be unable to finance, promote and distribute new recordings, and artists would be unable to earn royalties to support professional recording careers. As a result, there would be an economically insufficient supply of quality musical recordings for the buying public. It is the very purpose of the copyright law to ensure that artists and their record companies receive economic remuneration for their undertakings, so that an efficient supply of quality musical works and sound recordings will be produced and distributed to the listening public.

Musical Work

Similarly, and for the same reasons, persons desiring to make digital phonorecord deliveries of a musical work must obtain a license from the person who owns the song, which is typically a music publisher.

A. *Reproduction Right.* Recall that a copyright owner of a musical work has an exclusive right to reproduce the song in copies and phonorecords. This right is subject to the compulsory license provision set forth in Section 115 of the Copyright Act. Briefly, as long as records of a song were previously distributed in the United States, the compulsory license provision allows anyone else to compel the copyright owner of a song (e.g., a music publisher) to license the song at a license fee that is established by law—this fee is called, the “statutory rate.” The license which authorizes these transmissions is called a “mechanical license,” and the organization in the United States that issues most of them on behalf of music publishers is the Harry Fox Agency.

B. *Performance Right.* But there is a little controversy brewing here. The performance rights societies (e.g., ASCAP, BMI, SESAC) appear to be taking the position that a *performance* license is required to effect a digital phonorecord delivery, even though a statutory mechanical reproduction license has already been obtained for the same delivery. In their view, all transmissions of songs constitute performances of songs, whether or not they result in a specifically identifiable phonorecord made by or for the transmission recipient, and therefore, they say, you must also pay a public performance fee for these transmissions.

The performance rights societies have not yet disclosed how much they intend to charge for these transmissions. They are likely to seek something less than what they charge for transmissions that do not constitute digital phonorecord deliveries, such as “streaming” audio transmissions.

One may legitimately ask: If I am paying 7.55 cents for the digital phonorecord delivery, why must I also pay for its performance, particularly if the phonorecord is not truly performed or in any way rendered during the transmission? Isn't this a form of “double-dipping” by the music publishing industry?

The performance rights societies could point to the definition of “digital phonorecord delivery” to support its position. The complete definition of that term, which was added to the Copyright Act by the DPRA, is as follows:

A “digital phonorecord delivery” is each individual delivery of a phonorecord by digital transmission of a sound recording which results in a specifically identifiable reproduction by or for any transmission recipient of a phonorecord of that sound re-

ording, *regardless of whether the digital transmission is also a public performance of the sound recording or any nondramatic musical work embodied therein.* (emphasis added).

One could certainly infer from the italicized language that a digital phonorecord delivery *may* involve the public performance of the musical work embodied in the sound recording. But only that it *may* do so is the best you can say about it. If Congress intended to definitively answer the question, it certainly could have done so in unambiguous terms, such as, “A digital transmission containing a sound recording that results in a digital phonorecord delivery constitutes a performance of any musical work embodied in that sound recording.” But it didn’t.

Quite possibly, Congress recognized that some digital phonorecord deliveries may be performed or “streamed” for listening by the user while it is being downloaded; hence, the italicized language may have been needed to make certain that a digital phonorecord delivery will still be deemed such, even if the digital transmission happens also to constitute a public performance.

The performance rights societies could point to the definition of public performance:

“To perform * * * a work *publicly* means—

“(1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or

“(2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving, the performance or display receive it *in the same place or in separate places and at the same time or at different times.*” (emphasis added).

It appears, from the italicized language, that it does not matter whether you hear the performance at the same time as you download the file. Certainly, when a recording is being streamed to you, it is first buffered in your computer’s temporary memory, before the recording is actually played so that you can hear it. What is the difference between storing the recording in temporary memory and storing it on your hard disk (which is typically the case with a digital phonorecord delivery) prior to your hearing the records?

The problem with these arguments is that the above definition concerns not what a *performance* is, but what it means to perform a working *publicly* (as opposed to *privately*). Nevertheless, even if the transmission of a work is considered a public one, it may still not constitute a *performance*. According to the Copyright Act.

“To perform a work means to recite, render, pay, dance, or act it, either directly or by means of any device or process * * *”

It may well be asked, where, for purposes of the definition of “perform,” is the “rendering” or the “playing” of the work in the transmission of a downloaded music file? The performance rights societies could take the position that a sound recording of a work is itself a “rendering” (i.e. a performance, albeit a recorded one) of the work. This is as opposed to sheet music where the musical notations only are listed. When one digitally transmits the sound file, one is engaged in a transmission of the recorded performance, as hence, it may be said, the requisite “rendering” is taking place.

This argument would be plausible but not for the definition of “sound recordings,” which is defined in the Copyright Act as “works that result from the fixation of a series of sounds.” Thus, by definition, a sound recording is a fixation of sounds, not a rendering of sounds. Arguably, then, by transmitting a sound recording, you are transmitting a fixation of sounds, not a performance or rendering of them.

A better argument, from the performance rights societies perspective, would be to say that the downloading of a digital file is part of a process that results in a rendering or playing of the work at the recipient’s end. Recall that to perform a work means to render or play the work, “either directly or by means of a device or process.” Thus, arguably, the process of transmitting the bits constituting a digital sound recording file, the recipient’s buffering those bits or saving them to his hard disk or other storage media, and his playing of the bits, either as the bits are being downloaded or later, even after the entire file has been saved to disk, constitutes a playing or rendering of the sound recording, “either directly or by means of a device or process.”

Because technology now permits the playing of the bits either as the bits are being downloaded or after all the bits in the file have been received, the distinction between a digital phonorecord delivery (DPD) and a non-DPD (i.e., a purely “streaming” digital audio transmission) is being blurred. The performance rights societies may argue that all of these transmissions should be considered performances, mere-

ly because it is too impractical, on a case-by-case basis, to make a distinction between them.

In addition, the performance rights societies have argued that a digital phonorecord delivery provides an added value to the consumer—that is, with the advent of digital deliveries, the consumer no longer has to schlep down to a record store to buy a CD; he or she can just order it online and receive it in minutes. Consequently, that added value should be paid for. This argument, however, was first made before the success of companies like Amazon.com, from whom you can now order a CD and have it sent to you by overnight courier. What practical difference does it make whether the tracks constituting a record album come to you overnight or several minutes or hours after you have requested them to be downloaded?

Moreover, it may be reasonable to assume that if Congress made digital phonorecord deliveries subject to a compulsory license under Section 115, and set the fee for such licenses at the statutory rate, then, arguably, it should be unnecessary for anyone to pay more than the statutory rate to effect the delivery, “regardless of whether the digital transmission is also a public performance of * * * any musical work embodied therein.”

Again, the quoted language is from the Act’s definition of digital phonorecord delivery, and one could infer from it that Congress wanted to make certain that a digital download of a sound recording will be deemed a digital phonorecord delivery, subject to the compulsory license, with no one having to pay more than the statutory rate, even if the digital transmission happens also to constitute a public performance. Thus, once the statutory royalty is paid for a compulsory license, whether for digital phonorecord deliveries in general or incidental digital phonorecord deliveries, the payment of a performance royalty would not be necessary.

C. An individual takes a downloaded track and e-mails it to a friend.

Answer: When an individual takes a downloaded track and e-mails it to a friend, the copyrights in both the sound recording and the underlying musical work are being infringed, and, as a matter of policy, such activity should violate the copyright law.

Discussion: The reproduction of a copyrighted work by means of an individual’s e-mail is no different from any other form of reproduction, whether in the form of making tapes or posting files on a website, and the violation of the copyright owner’s exclusive right of reproduction would constitute copyright infringement, unless some exemption applies.

By using the term “friend,” the question raises the issue of how far should the currently recognized exemption for private non-commercial home copying apply. In the legislative history of the Sound Recording Act of 1971, Congress recognized what is loosely called, the “home recording exemption” which permits a consumer to make “home” recordings for their non-commercial use. The House Report stated,

It is not the intention of the Committee to restrain the home recording, from broadcasts or from tapes or records, of recorded performances, where the home recording is for private use and with no purpose of reproducing or otherwise capitalizing commercially on it.

An example of a home recording would be your making a cassette tape recording of a CD for use in your car tape player. The question arises: would this exemption permit your wife to use the tape in her car? The answer, in our view, is be yes, as “home recording” would include recording for use by members of your family. Since one is not likely to purchase a separate copy of a record for a spouse, child, sibling or other family member, record sales are not likely to be displaced significantly by such recording.

Making a copy for a friend or neighbor, however, is a different matter. In these instances, making recordings for friends and neighbors would likely displacing sales that the copyright owner might otherwise have made. Since virtually everyone has friends to whom they can email a copyrighted work, extending the exemption to beyond the family could easily defeat the purposes of the copyright law.

Moreover, by extending the permissible home-copying to “friends” would put the Federal Courts in the unenviable position of determining, “What is a friend?” Does it include acquaintances or just close acquaintances? Because this is not practical by any means, a line should be drawn at the outskirts of family members. Incidentally, for political reasons, I think we would all be wise to include, for this purpose, mothers-in-law.

D. An individual or company creates a searchable file-transfer program to make it easier for all of his friends to find and transfer each other’s musical films among themselves.

Answer: When an individual or company engages in activity, such as developing and maintaining a software program, that facilitates the activity in Question E

above, such individual or company should be liable for contributory copyright infringement, and, as a matter of policy, such activity should violate the copyright law.

Discussion: It will be recalled that we started with the assumption that a valid copyright subsists in both the sound recording and the musical works contained in the files being transferred and no permission to effect the transmissions have been granted by the owners of the copyrighted works. The problem in that many of the files transferred among friends may constitute files that are either not subject to copyright protection, or permission was otherwise granted by the copyright owners to effect the transfers. How do you stop the transfer of copyrighted files while permitting the transfer of other files?

We believe that Congress reached an adequate compromise in Section 512(d) of the Copyright Act.

(d) INFORMATION LOCATION TOOLS.—A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the provider referring or linking users to an online location containing infringing material or infringing activity, by using information location tools, including a directory, index, reference, pointer, or hypertext link, if the service provider—

(1)(A) does not have actual knowledge that the material or activity is infringing; (B) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or

(c) upon obtaining such knowledge or awareness, acts expeditiously to remove, or disable access to, the material;

(2) does not receive a financial benefit directly attributable to the infringing activity, in a case in which the service provider has the right and ability to control such activity; and

(3) upon notification of claimed infringement as described in subsection (c)(3), responds expeditiously to remove, or disable access to, the material that is claimed to be infringing or to be the subject of infringing activity, except that, for purposes of this paragraph, the information described in subsection (c)(3)(A)(iii) shall be identification of the reference or link, to material or activity claimed to be infringing, that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate that reference or link.

Whether a particular file transfer program, or information location tool, adequately complies with section 512(d) depends upon the findings of the District Court. Where a District Court has difficulty determining the extent to which the individual or company operating the location tool “acts expeditiously to remove, or disable access to, the [infringing] material,” the Court could appoint an impartial, special master to oversee compliance while the Court retains jurisdiction of the case. In any event, the courts would appear well equipped to apply the law in applicable cases.

E. An individual or company creates a searchable file-transfer program and allows the general public to use it to download and transfer music files to others, intending to derive profits from the program.

Answer: Same as the answer to D above.

F. An individual or company creates a searchable file-transfer program, intending to derive profits from the program, and allows the general public to use it to find and listen to one another’s music files—without the user’s actually downloading the music files onto their individual hard drives.

Answer: Same as the answer to D and E above. Whether the resulting transmission is a stream or a download, a violation of the copyright owner’s exclusive right of performance or reproduction is involved.

We hope this has been a useful explanation of the law and policy with respect to the very difficult questions raised by the advent of digital transmissions copyrighted works over the Internet.

Respectfully submitted,

ROBERT H. KOHN,
Chairman.

RESPONSES OF LARS ULRICH TO QUESTIONS FROM SENATOR THURMOND

Question: Mr. Ulrich, you have stated that you do not believe current laws are adequate to protect musicians’ property rights on the internet. What law or laws would you propose that the Congress should adopt to solve the problem of the intellectual property theft on the internet?

Answer: Perhaps my testimony on this issue was not as articulate as it could have been. I trust and believe that the courts will interpret existing law so as to provide

musicians and songwriters the same level of protection on the Internet as they have historically enjoyed in the off-line world. Obviously, I feel that current U.S. Copyright laws will not support enterprises like Napster that is why my band and I sued them. In the unlikely event that this proves not to be the case, we would welcome the opportunity to work with Congress to craft a solution. Our goal is to ensure that U.S. Copyright law continues to encourage the creation of intellectual property, which, as you are aware, is America's largest export.

Question: Mr. Ulrich, while it is possible to shut down web sites such as Napster that collect and distribute music files, it appears unlikely that all unauthorized downloading over the internet could be stopped. Do you believe that musicians will eventually have to enforce their rights against end-users, even if only on an occasional basis?

Answer: The recording industry has never entirely eliminated bootlegging, just as the retail trade will never entirely eliminate shoplifting. All we can ask is that the law clearly and strongly define our property rights as owners and creators of intellectual property. It will then be incumbent on us to take whatever measures are appropriate under the circumstances to combat violations of those rights. I believe that this is what the recording industry has historically done.

SUBMISSION FOR THE RECORD

PREPARED STATEMENT OF MARILYN BERGMAN, PRESIDENT AND CHAIRMAN OF THE BOARD, ON BEHALF OF THE AMERICAN SOCIETY OF COMPOSERS, AUTHORS AND PUBLISHERS

Mr. Chairman and Members of the Committee: My name is Marilyn Bergman. I am a songwriter and also the Chairman and President of the Board of Directors of ASCAP—the American Society of Composers, Authors and Publishers. I am pleased to submit this statement on behalf of ASCAP's more than 100,000 songwriter and publisher members. We deeply appreciate this Committee's continuing interest in and sensitivity to copyright issues. The era of the internet has made the need for your understanding of our concerns greater than ever. We at ASCAP are aware of the deep commitment that you, Mr. Chairman, the Ranking Democratic Member Senator Leahy and the other members of this committee have in protecting and nurturing copyright. With all of our colleagues in the copyright community, we know that we will always receive a full and fair hearing before this Committee.

First, let me relate some information about ASCAP. As most of you know, ASCAP is the largest and oldest of three performing rights licensing organization in the United States, the others being Broadcast Music, Inc. and SESAC, Inc. today, ASCAP has over 100,000 writer and publisher members and a repertory in excess of four million copyrighted works. ASCAP licenses on their behalf, the non-dramatic performing rights in their music.

The right of public performance, granted to copyright owners by Section 106(4) of the Copyright Law, is one of the most important of all the copyright rights. It is the largest single source of income for songwriters, most of whom are not performers and do not benefit from concerts and recording contracts. From the time ASCAP was founded in 1914 by the leading songwriters, composers and music publishers of that era, including Victor Herbert, John Philip Sousa, Irving Berlin and Jerome Kern, our main objective has been to find those who are performing music publicly and to offer them licenses, at reasonable and fair fees, to perform our members' music. Our principal licensing tool is the blanket license—a license to perform any or all of the works in the ASCAP repertory for which the user pays a license fee calculated on a mutually agreed upon basis.

One constant in our business has been technological change. With the advent of radio and commercial phonograph recordings in the 1920's, then background music services in the 1930's, television in the 1940's, cable and satellite television in the 1960's and 1970's, and now the Internet, ASCAP has faced the challenge of licensing new and ever-expanding industries which rely on music—the "raw material" that we create and own—as a principal source of entertainment to generate their revenues. When each new technology using copyrighted music developed, there was, of course, a period of marketplace give and take before the parties ultimately and inevitably reached a settled and mutually acceptable licensing regime.

I would be less than candid if I told you that all music users obey the Copyright Law or even cheerfully pay license fees for the property they use. Songwriters and publishers have been forced to fight courtroom battles with the background music, radio, television and cable industries, among others. While this has not been the course that we wished to follow, this history has produced a framework within

which most license fees are negotiated between ASCAP and representatives of user industries, or sometimes determined by a federal court. This model for license fee dispute resolution is established by a consent decree, the Amended Final Judgment entered in *United States v. ASCAP*. Under the ASCAP Consent Decree, any user may obtain a license to perform the works in the ASCAP repertory merely by written request to ASCAP, and ASCAP can never say “no,” as long as the user is willing to pay a reasonable license fee. If ASCAP and the user cannot agree on a license fee, the user may apply to the court for a determination of the reasonable license fee.

The fact is that each new technology using copyrighted music has presented not merely challenges, but opportunities both for those who develop the technology and those whose copyright property made the technology profitable. We must always keep in mind that, without the music which my writer and publisher colleagues at ASCAP create and own, and without all the other creative works such as movies, sporting events, computer programs, and books, technological marvels would be empty and unprofitable shells. *Our* creativity, *our* property, fuels their engines. The public—the audience—wants to enjoy what *we* create. When a technological development comes along which can provide our works to the public in a new way, we applaud it, and we want it to grow and prosper. Please understand that the last thing in the world we want is to shut down new uses of music; to the contrary, from our perspective, the more music that is performed for the public, the better. We simply want to be paid a fair fee for the use of our musical property, because, after all, our creative property is what makes these new technologies succeed. Therefore, we must all prosper, or none of us will.

Let me now turn to ASCAP and the Internet. In 1995, ASCAP set out to license the performances of our member’s music in that new and evolving medium. We did so by creating a Department of New Media and Technology and formulating an Experimental License Agreement for Internet Sites on the World Wide Web. In its earliest form, the ASCAP Website License was a blanket license, granting the operator of a website that employed music access to the entire ASCAP repertory. The fee for the license was calculated as a small percentage of either revenues or operating expenses. In addition, for websites that could track and account for their transmissions of music, or ASCAP music, there were alternative fee rates that could result in reduced license fees.

As I have said, ASCAP began its efforts to license Internet performances of its members’ music in 1995. By the end of 1997, we had only 125 websites license. By December 1999, the number of licensed website’s had grown to over 1,500. These include some of the largest entertainment websites, as well as the most popular aggregators of streamed music sites. Last year, for the first time, collections from Internet licensees reached almost one million dollars. And, importantly, ASCAP is the only performing rights society in the world that makes regular distribution of royalties to its members for Internet performances.

This past December, ASCAP began offering a new form of license agreement for website operators. Based on comments from many licensees and prospective licensees, we made a major modification in the new license, eliminating the operating expense-based fee calculation and replacing it with a fee that is based on website traffic. The new license also provides for simplified music use reporting, which we use in distributing royalties to our writer and publisher members for Internet performances of their music.

As part of our licensing efforts, ASCAP sought early on to make use of the new technologies. For example, the Website License was made available on the ASCAP website, www.ascap.com, where the potential licensee can also find “ASCAP RateCalc,” an online, interactive program that calculates the license fee based on information provided by the licensee. In addition, we employ “ASCAP EZ–Eagle,” a program that search the Internet for Web sites that are transmitting music files and, therefore, are potential licensees.

The important message from these facts is that the free marketplace is working exactly as it should. ASCAP’s licensing team is meeting continually with industry groups, including the operators of major music-using websites, to discuss the issues and, perhaps, an industrywide license agreement, just as we have industrywide agreements with other user groups. We’ve had what we believe are some promising meetings, and we hope they will bear fruit. It is certainly our desire to continue in this vein, for this is how markets work.

In addition, many Web site operators, including radio stations and they bulk of the country’s commercial television broadcasters, have requested ASCAP licenses for their Internet performances. We will use our best efforts to agree on license fees for their uses; if we cannot agree, the court will set reasonable fees under the contract decree. ASCAP has also entered into a number of partnership arrangements

with leading players in the Internet world, designed to benefit our members by increasing exposure to their music and providing them with reciprocal services such as advertising and web pages.

What lies ahead both for the near term and the future for ASCAP's members and the Internet? Certainly, we watch with great interest and some trepidation the battles being fought today between our colleagues in the record and motion picture industries and their adversaries. These are the types of growing pains with which we are familiar from our own past experiences, which I mentioned earlier. But, more importantly, our experience reflects the ability of reasonable people to work out negotiated solutions to difficult business problems. Compulsory license legislation is neither necessary nor desirable. The marketplace works.

ASCAP's Board of Directors, its management and its members do not fear the new technology—we welcome the challenges it brings to us as the world's leading performing rights organization, to continue our efforts to protect the rights of creators and to ensure that they are fairly compensated for the use of their copyrighted works, and to benefit the public by ensuring the availability of the world's greatest music.

In conclusion, Mr. Chairman and members of the Committee, I urge you to proceed with caution in considering whether to enact more legislation with respect to Copyright and the Internet. Certainly from the point of view of creators and copyright owners, I believe that in this arena, which changes from minute to minute, less is more. I remain confident that, as has been ASCAP's experience in the past, reasonable men and women can agree in the free market, a free market which is at the very core of America's values, on arrangements that will produce fair prices for valuable property—fair license fees for performances of copyrighted music on the Internet.

